

**Title: Trade in Health Services by a Developing Country: the
Case of Botswana**

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ABSTRACT

This research presents an analysis of the health sector in Botswana in the context of a middle income developing country that endeavours to harness benefits from trade in health services. It finds that the health sector is still dominated by public sector provision amidst a gradually developing private sector that is mainly supported by domestic investments. The participation of foreign firms is predominantly through management of local private hospitals by South African hospital groups. Botswana remains a net importer of health services, especially through consumption abroad from the neighbouring South Africa. Nonetheless, import substitution is gradually taking root through the growing private sector that provides services that were previously imported. There remains a significant level of dependence on foreign health professionals, especially specialist medical doctors to augment shortages in the domestic healthcare system. Despite local media reports indicating concerns about Botswana health professionals working outside the country, lack of data impedes the ability to analyse and appreciate the magnitude and possible impact of this movement on the economy and the health sector. The need for further research remains especially on the possible impact of liberalisation of trade in the health sector in order to adequately guide policy. Also, the current inadequacy of data makes it difficult to appreciate the trends in trade in health services, thus, there is need to develop data sets to support analysis and policy debates on the subject.

TABLE OF CONTENTS

PLAGIARISM STATEMENT	ii
ABSTRACT	iii
TABLE OF CONTENTS	iv
LIST OF TABLES, FIGURES AND BOXES	vii
LIST OF ABBREVIATIONS.....	viii
GLOSSARY OF TERMS.....	x
ACKNOWLEDGEMENTS	xii
1 INTRODUCTION.....	1
1.1 Background	1
1.1.1 Definition of Trade in Health Services	1
1.1.2 Botswana's Economic Strategies and Trade in Health Services	2
1.2 Statement of the Problem.....	3
1.3 Overview of the Methodology	5
1.4 Rationale and Goals	6
1.5 Delimitations of the Study	6
2 LITERATURE REVIEW	8
2.1 Trade in Services – An Overview	8
2.2 Trade in Health Services.....	9
2.2.1 Definition of Health services	10
2.3 Methods (Modes) of Supply of Health Services.....	11
2.3.1 Cross-border Supply (Mode 1)	11
2.3.2 Consumption Abroad (Mode 2)	13
2.3.3 Commercial Presence (Mode 3).....	14
2.3.4 Movement of Natural Persons (Mode 4).....	16
2.4 Health and Trade Policy Nexus	18
2.4.1 Potential Benefits and Costs of Liberalisation of Trade in Health Services	18
2.4.2 Trade Agreements and Health Services	21
2.4.3 GATS Provisions on Health Services	22
2.5 Direction of Trade in Health Services.....	24
2.6 Trade in Health Services in Botswana	26
2.6.1 Migration of Nurses and Midwives.....	28
2.7 Methodological Approaches to Analysing Trade in Health Services	28

2.7.1	OECD Approach to Estimate Trade in Health Services	29
2.7.2	WHO's Guide for Conducting Country Studies	30
2.7.3	Choice of the WHO Framework	31
2.8	Conclusion	32
3	METHODOLOGY	33
3.1	Approaches to Collection and Analysis of Data and Information	33
3.1.1	Methods of Collecting Data and Information	33
3.1.2	Procedures Followed to Obtain Information.....	35
3.2	Data Analysis	37
3.3	Conclusion	38
4	FINDINGS OF THE STUDY	39
4.1	Macroeconomic and Trade Environment.....	39
4.1.1	Overview of the Botswana Economy.....	39
4.1.2	Botswana's Trade	41
4.2	Overview of State of the Healthcare System	43
4.2.1	The Role of Health Insurance	46
4.3	National Policies and Strategies for Trade in Health Services.....	47
4.3.1	Overview of the Legal and Regulatory Environment in the Health Sector.....	47
4.3.2	Trade Policy and Health Services	48
4.3.3	Public Healthcare Sector Strategies	50
4.3.4	Private Healthcare Sector Strategies.....	52
4.4	Mode 1: Cross-border Supply	52
4.5	Mode 2: Consumption Abroad.....	55
4.5.1	Exports of Health Services.....	55
4.5.2	Imports of Health Services through Mode 2.....	56
4.5.3	Training of Healthcare Professionals Abroad.....	58
4.5.4	Import and Modal Substitution in Health Services	61
4.6	Mode 3: Commercial Presence	63
4.6.1	Foreign Direct Investment in the Health Services Sector	63
4.6.2	Policy and Regulatory Measures Affecting Mode 3	64
4.7	Mode 4: Presence of Natural Persons	65
4.7.1	Estimating Inward Movement of Healthcare Professionals.....	65
4.7.2	Regulatory Measures Affecting Mode 4.....	69

4.7.3	Estimating Outward Movement of Healthcare Professionals	72
5	DISCUSSION.....	75
5.1	Summary of the Results	75
5.2	Discussion of the Results	77
6	CONCLUSION AND RECOMMENDATIONS.....	79
	REFERENCES	81
	ANNEX 1: CHECKLISTS OF QUESTIONS FOR INSTITUTIONS INTERVIEWED	89
	ANNEX 2: LIST OF INSTITUTIONS AND FACILITIES INTERVIEWED AND/OR PROVIDED DATA/INFORMATION.....	98
	ANNEX 3: BOTSWANA'S SCHEDULE OF GATS HORIZONTAL COMMITMENTS AND SPECIFIC COMMITMENTS ON HEALTH SERVICES	99

LIST OF TABLES, FIGURES AND BOXES

TABLES

Table 1: Health Services Defined and Included in this Study -----	11
Table 2: Data and Data Sources-----	34
Table 3: Selected Economic Indicators (2010 – 2014)-----	40
Table 4: Sectoral Percentage Contribution to GDP (at Constant 2006 Prices) -----	40
Table 5: Selected Key Health and Other Social Indicators -----	43
Table 6: Hospitals and Hospital Beds in Botswana-----	44
Table 7: Laboratory Services Procured by Government from Laboratories in Botswana and South Africa - 2009/10 to 2013/14 (in BWP)-----	53
Table 8: Imports of Laboratory Services by Private Medical Laboratories in 2013 (in BWP)-----	54
Table 9: Number and Cost of Medical Referrals to South Africa - 2010 - 2014 -----	57
Table 10: Medical Aid Schemes Payouts to South African Service Providers 2010 – 2013 (in BWP)-----	57
Table 11: Students in Health-related Programmes in Local Institutions During 2012/13 Financial Year	59
Table 12: Botswana's Students in Health Programmes in Foreign Countries During Financial Year 2012/13-----	60
Table 13: Estimates of Expenditure on Training of Health Personnel Outside Botswana in 2011-----	60
Table 14: Value of Health Services Procured from Local Health Facilities - 2009/10 - 2013/14-----	62
Table 15: Selected Health Professionals Registered to Practise in Botswana in 2013 -----	66
Table 16: Medical Doctors Registered to Practise in Botswana by Areas of Specialty -----	67
Table 17: Selected Registered Specialist Doctors by Nationality -----	68
Table 18: Verifications for Botswana Nurses by Country (2010 - 2014)-----	73

FIGURES

Figure 1: Percentage Shares of Botswana's Merchandise Exports (1991, 2001 and 2011) -----	42
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BOXES

Box 1: Minutes of the Meeting of the WTO Council on Trade in Services Held on 14 October 1998 ----	23
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LIST OF ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ARV	Anti-retroviral therapy
ASEAN	Association of Southeast Asian Countries
BEAC	Business and Economic Advisory Committee
BHH	Botswana Health Hub
BHPC	Botswana Health Professions Council
BLNS	Botswana, Lesotho, Namibia and Swaziland
BoMAID	Botswana Medical Aid Society
BITC	Botswana Investment and Trade Centre
BONU	Botswana Nurses Union
BOP	Balance of Payments
BPH	Bokamoso Private Hospital
BPOMAS	Botswana Public Officers Medical Aid Scheme
BWP	Botswana Pula
DTEF	Department of Tertiary Education Financing
EBOPS	Extended Balance of Payments Statistics
EDD	Economic Diversification Drive
EPA	Economic Partnership Agreement
EC	European Commission
EU	European Union
FDI	Foreign Direct Investment
GATS	General Agreement on Trade in Services
GDP	Gross Domestic Product
GPH	Gaborone Private Hospital
HIV	Human Immuno Deficiency Virus
HRDC	Human Resource Development Council
ICT	Information and Communication Technology
MoH	Ministry of Health
MTI	Ministry of Trade and Industry
NBFIRA	Non-Bank Financial Institutions Regulatory Authority
NMCB	Nursing and Midwifery Council of Botswana

OECD	Organisation for Economic Co-operation and Development
SACU	Southern African Customs Union
SADC	Southern African Development Community
SHA	System of Health Accounts
TFTA	Tripartite Free Trade Area
CPC	Central Product Classification
UNCTAD	United Nations Conference on Trade and Development
WHO	World Health Organisation
WTO	World Trade Organisation

GLOSSARY OF TERMS

Commercial presence (Mode 3): The supply of a service that requires the service supplier of one WTO Member to establish an operation in the territory of another WTO Member (Goode, 2003).

Consumption abroad: (Mode 2): The supply of a service where the consumer travels from one WTO member state to the member state of the supplier of the service in order to consume the service (Goode, 2003).

Cross-border supply (Mode 1): The exchange or sale of a service that involves neither the movement of the supplier nor that of the consumer of the service (Goode, 2003).

GATS – General Agreement on Trade in Services: A WTO agreement on the outcome of the Uruguay Round of Negotiations which covers all trade in services, except bilateral air traffic rights and services supplied in the exercise of governmental authority per Article I.3 of the GATS (Goode, 2003).

GATS Commitments: A legally binding undertaking in the Schedule of Specific Commitments of each WTO Member state and annexed to the GATS, specifying; (a) terms, limitations and conditions on market access; (b) conditions and qualifications on national treatment; (c) undertakings relating to additional commitments; (d) where appropriate, the time-frame for implementation of such commitments; and (e) the date of entry into force of such commitments (World Trade Organisation, 2002).

Health services: Services in the WTO Services Classification List that are deemed to fall within the health sector, including, "medical and dental services"; "services provided by midwives, nurses, physiotherapists and paramedical personnel"; and services falling within the health related and social services" sector. In particular, health education is part of the list of these services (World Trade Organisation, 1991).

Internal brain-drain: In the context of health services, the movement of the health workers from the public sector to the private sector, to the extent that it creates shortages in the public

sector provision of health services. External (or international) brain-drain, on the other hand is the movement of health workers to work in other countries, leading to shortage of health professionals in the domestic health sector (Arunanondchai & Fink, 2007; Cattaneo, 2009).

Medical tourism: Travel of residents of one country to another country for the purpose of obtaining a health service (Lunt et al., 2011).

Movement of natural persons (Mode 4): The supply of a service that requires the movement of the service supplier to another country in order to produce or supply the service (Goode, 2003).

Trade in services: Exchange or sale of a service between residents of one country and residents of another country according to one of the four modes of supply (Goode, 2003; Organisation of American States, Inter-American Development Bank, & Economic Commission for Latin America and the Caribbean, 2003).

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1 INTRODUCTION

Like trade in services generally, trade in health services has been observed to be growing rapidly. This phenomenon is influenced by the rapid growth of the health sector (Chanda, 2002) and the competition among countries to become exporters of health services through the establishment of clinics for servicing foreign clientele (Cattaneo, 2009). Trade in health services, therefore, is increasingly being used as part of countries' economic strategies to achieve broader economic objectives, including export and economic diversification. Despite the perceived potential of the health sector to contribute to these national development strategies, the possible impact of trade and trade liberalisation on the economy and on the health sector itself, including access to health services is barely understood, especially in developing countries. Botswana is no exception. This research is intended to make a contribution to literature and data to fill this existing gap.

1.1 Background

1.1.1 Definition of Trade in Health Services

The World Trade Organisation (WTO) defines trade in services in Article I.2 (a) – (d) of the General Agreement on Trade in Services (GATS) as:

"the supply of a service;

(a) from the territory of one Member into the territory of any other Member;

(b) in the territory of one Member to the service consumer of any other Member;

(c) by a service supplier of one Member, through commercial presence in the territory of any other Member;

(d) by a service supplier of one Member, through presence of natural persons of a Member in the territory of any other Member" (World Trade Organisation, 2002).

This definition illustrates the four modes of supply of services between Member States of the WTO; (a) Cross-border supply (Mode 1), (b) Consumption abroad (Mode 2), (c) Commercial presence (Mode 3) and (d) Movement of natural persons (Mode 4). In like manner, the definition of trade in health services applies but in services that are considered to be within

the health sector¹. The Services Sectoral Classification List, commonly referred to as the W120, classifies services into 12 sectors and over 150 sub-sectors (World Trade Organisation, 1991). The W120 List is considered highly aggregated. It is usually used in conjunction with the Central Product Classification (CPC) List of the United Nations (United Nations, 2002), which provides definitions for specific services and is used for scheduling purposes under the GATS.

1.1.2 Botswana's Economic Strategies and Trade in Health Services

The Botswana Excellence: A Strategy for Economic Diversification and Sustainable Growth includes the endeavour to develop the health sector, among other services sectors. Among the objectives of the national strategy are to broaden the economic and export base (and reduce dependence on the mining and Government sectors), create more employment opportunities, attract foreign direct investment and develop a vibrant and globally competitive private sector (Government of Botswana, 2008, 2011a). This strategy is in line with the National Development Plan and the Long Term Vision for Botswana whose overarching objectives have been set within the broader context of achieving economic diversification in order to sustainably maintain the past success of high economic growth and development (Government of Botswana, 1997, 2009a). In this context, the health sector has been identified as one of the sectors to not only provide healthy and productive human resources for other economic sectors, but also with the potential to generate services that can be offered for trade, especially within the southern African region (Government of Botswana, 2008; Ministry of Health, 2009).

Among the objectives of Botswana's National Trade Policy, are, "to develop strategies that will make trade the main engine of growth" and "to increase and improve market access and international competitiveness for Botswana's goods and services" (Government of Botswana,

¹ Health services are covered under different services sectors and sub-sectors. The "medical and dental services" and "services provided by midwives, nurses, physiotherapists and para-medical personnel" are listed under the "Professional Services" sub-sector which forms part of the "Business Services" sector. Also listed under the "Professional Services" sub-sector are "veterinary services", but are excluded for the purposes of this research. The sector on "Health Related and Social Services" lists other health services sub-sectors, including "Hospital services"; "other human health services"; "social services" and "other".

2009b). The National Health Policy does not explicitly mention the need for the health sector to participate in international trade. However, it acknowledges the necessity of collaboration between the ministries of health and trade and industry to promote the establishment of pharmaceutical and biomedical companies in Botswana (Government of Botswana, 2011b). By extension, this would necessitate attraction of foreign direct investment (FDI) in the health sector. Through the national strategy, Government has established the Botswana Health Hub (BHH) to foster economic diversification through development and growth of exports of health services. The objectives of the BHH include, among others, the improvement of efficiency within the sector, the development of clinical and research centres of excellence to serve the regional and international clientele as well as promote medical tourism (Ministry of Health, 2009).

There are therefore, national policy and strategy objective to develop the health sector to contribute to economic diversification through exports of health services. However, there is currently limited understanding of the health sector in terms of its capacity and capability to meaningfully participate in the globalised and competitive health sector. Little is known about the structure, magnitude and export performance of the private health sector which is usually active in participating in trade. Thus, not much is known about the potential that exists in the Botswana's health sector to trade in health services. This study is intended to be a contribution to this lack of analysis. It is hoped that it will be useful to policy and decision making in this sector.

1.2 Statement of the Problem

Over the last five years, developments in the health sector in Botswana have been characterised by continued dominant role of public provision of health services which are augmented by a growing private sector. Some investments have been realized in terms of the establishment of new health facilities such as private hospitals. The contribution of the medical aid schemes in the growth of the private medical facilities is significant. The new and biggest private hospital in the country was established through joint investment between two medical aid schemes with the objective to increase private health services providers and broaden choice for their members. The technological developments, especially in ICT presumably make access to health services across borders easier. Are these developments an

indication of real potential for exports of health services? Are the conditions in terms of the legal, regulatory and institutional frameworks, national policy and strategy supportive of trade in health services?

The intent of this research is to assess the trends in trade in health services in Botswana. The study is motivated by the developing trend in developing countries, including Botswana where the development of trade in services is seen as an opportunity to enhance the contribution of the health sector to services exports and growth and diversification of the economy (Cattaneo, 2009; Lautier, 2013; Obayashi & Sanogo, 2009). In the case of Botswana, the national economic strategies to enhance economic benefits from trade in health services is not backed by analysis of the sector and its potential to achieve the intended objectives (Government of Botswana, 2011a).

This study is intended to fill the data, information and literature gaps and hopefully contribute to informing and guiding policy and decision making. It is hoped that the data provided will provide a baseline which researchers and policy makers could use or build on in their work. The study also intends to show the possible effects of trade liberalisation on the provision of health services to the population. This is important, especially taking into account the perception that liberalisation of trade in health services tends to drive resources to the developed countries. Liberalisation is also said to result in the re-allocation of resources from the public sector where they serve the poor to serve the rich in the private sector in developing countries. Further, the study will contribute in formulating positions for trade negotiations in health and related services. Botswana is currently negotiating trade in services with SADC and EU. In future negotiations will likely be commenced under the Tripartite Free Trade Area (TFTA) and the envisaged Continental Free Trade Area (CFTA). In these negotiations, health services are likely to be put up for negotiations. This study will provide valuable guide for Botswana in the negotiations.

The study intends to provide answers to the following questions:

1. What is the direction, magnitude and estimated value of trade in health services in Botswana?

2. What are the opportunities and challenges imposed by trade liberalisation from a public health perspective?

1.3 Overview of the Methodology

The study starts with a review the macroeconomic and trade policy environment; and the general state of the health sector are mapped. This puts in context the economic and health status of Botswana as a developing country with the national endeavour to promote trade in health services as part of a strategy to achieve economic diversification and sustainable growth. Thereafter, an estimate of the value and direction of trade flows in health services by Botswana was undertaken through collecting, collating, analysing and presenting data from different sources both in the public and private health sector institutions and facilities according to the four modes of supply.

The identification of the data sources was guided mainly by the WHO guide for conducting country studies in trade in services (World Health Organisation, 2005a, 2005b). The institutions and facilities included in the data collection process include, the ministries of health and education, hospitals, medical aid schemes and/or their administrators, medical laboratories and health professions councils. Insights were also gathered through interviews of institutions and individuals and documents were reviewed to understand the policy, strategy and measures affecting trade in health services. The intention was to conduct interviews with all the possible respondents among the institutions and facilities. However, a few facilities which could not timely avail themselves for interviews were left out, in particular, the smaller medical aid schemes and Princess Marina Hospital. Princess Marina Hospital is a public referral which used to process referrals to foreign health services providers on behalf of the other public health facilities. However, it was established that this function is currently being undertaken by a private South African company which produces regular reports for the Ministry of Health.

The WHO guide for conducting country studies in trade in services was also helpful in formulating questions and issues to gather insights from the interviewees. These sources provided evidence to conduct an analysis of the country's level of commitments on health services and assessment of the challenges and opportunities posed by trade liberalisation of

trade in health services. Finally, the study draws lessons and provides options for policy makers.

1.4 Rationale and Goals

In the context of Botswana, the desire to position the country as a potential exporter of health services has necessitated a response to questions about the readiness of the health sector and the country to export health services. Are the regulatory frameworks adequate and supportive of the country's desire to participate in the international trade space? Are the service providers available to serve both the local and the foreign markets? While these questions can be easily responded to in a developed country setting, there is lack of data and literature in the case of Botswana.

The main objective of the study is to assess the state of trade in health services in Botswana. The study intends to estimate the exports and imports of health services as well as discuss the policy and regulatory measures affecting trade of health services.

The specific objectives of the study are to:

- Discuss government policy and strategy on the development of trade in health services.
- Discuss the developments in the private health services in Botswana.
- Analyse the direction of trade flows (exports and imports) of health services.
- Discuss regulatory measures affecting trade in health services.

1.5 Delimitations of the Study

The coverage of the research in terms of data collection was confined to Gaborone, the capital city. Coverage of the entire country would not have been possible due to the unavailability of funds and inadequate time. The study was undertaken over a period of four months, between September 2014 and January 2015. Given that all the government institutions responsible for policy making and custodianship of data are located in Gaborone, there was no significant negative effect on accessing relevant government officials for the interviews and accessing data. Further, the private health sector is by and large concentrated

in the capital city. The two biggest private hospitals in Botswana with the capacity and/or prospects to export/import health services are located in Gaborone. Very few and fairly small private clinics are located in the only other city, Francistown, and in Maun, a tourist attraction town in the north-western part of the country. Given the high concentration of the private health sector in Gaborone, the results are safely representative of Botswana as a country. Covering the entire country will be equivalent to chasing too few players in the sector at a huge cost only to obtain relatively little additional data, unlikely to influence the findings of the study. In any case, given the size and state of private health in other areas of the country, the potential of the country to trade in health services most likely remain the affair of the capital city.

The WHO guide for conducting country studies in trade in services was very helpful in identifying sources and obtaining data and gathering insights from the interviews. However, in this study, in some of the cases, the presumption by the guide that such data would exist did not hold. Some of the data did not exist or could not be availed, either because it was never collected or was not kept in formats that are compatible for the purposes of this study. For instance, data on movement of health workers out of the country was not available, making it difficult to understand the impact of Mode 4 from Botswana's perspective as a sending country (exporter).

The rest of this paper is arranged as follows. Chapter 2 reviews the literature on trade in health services and brings out its relevance to Botswana as a developing country aspiring to develop health services for trade. It also discusses the methodological approaches to analysing trade in health services and informs the choice of the WHO guide for conducting country studies in trade in services for this study. Chapter 3 outlines the methods for conducting this study. Chapter 4 presents the results of the study. It starts with presenting the macroeconomic and trade environment as well as the state of the healthcare system in Botswana in the context of Botswana as a developing country that endeavours to develop health services as part of a national strategy to diversify the economy and exports. The following parts of Chapter 4 presents the estimates and direction of trade flows of health services through the four modes of supply. Chapter 5 presents the discussion and interpretation of the results of the study while Chapter 6 concludes and proposes recommendations for policy and further research.

2 LITERATURE REVIEW

This chapter reviews the literature on trade in health services. Section 2.1 looks at trade in services generally; the definition of trade in services and significance of the services sectors in economies. Section 2.2 focuses on trade in health services, by providing a definition of trade in health services and an overview/assessment of global trends and developments in the sector. Section 2.3 defines the four modes of supply of services and how they manifest in trade in health services. In Section 2.4, the literature on the relationship between trade and health policies is reviewed, especially the likely implications of trade liberalisation on access to healthcare. The next section looks at the direction of trade in health services, including the developments concerning the emerging developing country exporters. Even though scanty, literature on trade in health services in Botswana is reviewed in Section 2.6. Section 2.7 deals with the methodologies that have been employed in previous studies and makes a case for the choice of the WHO guide for conducting country studies in this study. Section 2.8 concludes the review of literature.

2.1 Trade in Services – An Overview

The importance of services in the economies around the world has been established by different authors. Some authors observe that services represent the fastest growing sector of the world economy (Lautier, 2013, 2008; Borchert, Gootiiz, & Mattoo, 2012; World Health Organisation, 2010; Goswami & Mattoo, 2008; Bernal, 2007; Hoekman, 2006). Services account for two thirds of the global output, one third of global employment and close to 20 percent of global trade. In developed countries, services account for about 75 percent of gross domestic product (GDP) and about the same share of national employment. In the case of middle income countries like Botswana, services' shares of GDP and national employment are 53 percent and 37 percent respectively (Low, 2013a).

The GATS defines trade in services in Article I(2) according to the four modes of supply as:

"the supply of a service;

(a) from the territory of one Member into the territory of any other Member;

(b) in the territory of one Member to the service consumer of any other Member;

- (c) by a service supplier of one Member, through commercial presence in the territory of any other Member;
- (d) by a service supplier of one Member, through presence of natural persons of a Member in the territory of any other Member" (World Trade Organisation, 2002).

Trade in services is growing rapidly owing to the increasing use of information and communication technologies (ICT) that facilitate efficient exchange between the services providers and consumers of services. As a result, services, which were traditionally viewed as non-tradable can now be transacted without the necessity for the consumer and the service provider to be in the same location. This is especially true in the health services sector where the evolution of the internet has made possible services like medical diagnosis without requiring the movement of either the healthcare provider or the patient (Bernal, 2007). Fragmentation of production processes and location of firms across countries as a result of global value chains has also led to growth of services associated with this phenomenon (Low, 2013a, 2013b; Sally, 2013). Other factors responsible for the growth in trade in health services are associated with an increasing trend of liberalisation of trade in services and regulatory reforms that result in the commercialisation and privatisation of provision of traditionally government services (Chanda, 2001; Loewenson, Tayob, Wadee, Makombe, & Mabika, 2007; Sexton, 2001).

2.2 Trade in Health Services

It is necessary to define health services and describe how they are traded. In 2.2.1 below, health services are defined according to the WTO's Services Sectoral Classification List, also referred to as the W120 (World Trade Organisation, 1991). The relationship between the W120 List with the Central Product Classification (CPC) List of the United Nations (United Nations, 2002) is discussed. In the following sections, 2.3.1 to 2.3.4, the four modes of supply of services are defined. The challenges associated with measuring health services trade flows according to these modes are also discussed. South Centre (2005) notes, however, that using the W120 in conjunction with the CPC has its own challenges. The W120 was developed using the provisional CPC of 1991. When the CPC was revised during the subsequent years, the W120 was revised along with it. According to the World Trade Organisation (1997) as cited by South Centre (2005), members are not obliged to use either

the W120 or the CPC when scheduling commitments, thus there is potential problems on the W120 and the revised versions of the CPC.

2.2.1 Definition of Health services

The W120 and the CPC are usually used together. The W120 is generally viewed as the abbreviated version of the CPC. It is based on it; the CPC provides "... a more comprehensive listing and description of sectors/sub-sectors acting as a cross-reference" (South Centre, 2005). Therefore, in describing the sectors and sub-sectors of health services, the corresponding CPC codes/numbers are used.

The W120 does not have a separate and comprehensive sector on health services. According to United Nations (2002), the health and social services sector is divided into sub-sectors, "hospital services (CPC 9311), "medical and dental services (CPC 9312)²", "other human health services (CPC 9319", "veterinary services (CPC 931". According to Herman (2009), health services include health education services and "health insurance services (CPC 71320". In this study, education and training of health professionals is assumed to occur at tertiary level of education, thus included in the definition of health services, is "university and other higher education services (CPC 92390)" but that education service has to be only specific to health. For purposes of analysis on health services, authors usually exclude veterinary services (Lautier, 2008, 2013; Cattaneo, 2009; Herman, 2009; Bernal, 2007). It is for this reason that this study will also exclude veterinary services.

Thus in this study, the health services are defined to include hospital services (CPC 93110), medical and dental services (CPC 9312) and services provided by nurses, midwives, physiotherapists and paramedical personnel (CPC 93191) as well as health education services (CPC 92390) and health insurance services (CPC 71320). Table 1 has been constructed using the CPC version 1.1 of 2002 and summarises the health services sectors covered by this study.

² Within the sub-sector "other human health services (CPC 9319)" are "other human health services n.e.c. (CPC 93199)", which contains "services provided by medical laboratories". This study covers "services provided by medical laboratories".

Table 1: Health Services Defined and Included in this Study

CPC health services	Health services included in this study?
Medical and dental services (CPC 9312)	Yes
Services provided by midwives, nurses, physiotherapists and para-medical personnel (CPC 93191) are included	Yes
Veterinary services (CPC 932)	No
Hospital services (CPC 93110)	Yes
University and other higher education services (CPC 92390)	Education only as it relates to health
Accident and health insurance (CPC 71320)	Only health insurance services are included
Other human health services n.e.c. (CPC 93199)	Only services provided by medical laboratories are included
University and other higher education services (CPC 92390)	Only health education services are included

Source: Central Product Classification (CPC) Version 1.1

2.3 Methods (Modes) of Supply of Health Services

Article I.2 of the GATS defines four ways of delivering services from one country to the other (World Trade Organisation, 2002). The understanding of the four modes of supply is imbedded on the location of the service supplier and consumer of the service. Hoekman (2006) attributes the early development of the typology that informed the modes of international exchange of services to Sampson and Snape (1985). He asserts that the framework was later incorporated into the GATS. These four modes of supply, as they relate to health services are discussed below and form the general framework that will inform the discussions and the methods for data collection, collation and presentation to achieve the objectives of this study.

2.3.1 Cross-border Supply (Mode 1)

The GATS defines cross-border supply (Mode 1) in Article I.2(a) as "..... the supply of a service from the territory of one Member into the territory of any other Member" (World Trade Organisation, 2002). This mode of supply refers to cases where health services are traded across the borders of WTO members with neither the service supplier nor the consumer of the service having to move to either's physical location. The health services would be supplied through traditional surface mail, electronic mail or through other electronic means such as in the case of telemedicine. Examples include clinical consultations and diagnosis using mailed laboratory samples and radiology (Cattaneo, 2009; Chanda, 2002). Cattaneo (2009) adds to the list, ancillary health services such as distance medical education and

training, medical transcription back office, medical research tools and databases and medical insurance. Bernal (2007) cites a World Bank (2005) report that estimated the value of cross-border delivery of health services at US\$ 140 billion, which was at the time forecasted to grow at 6 percent per annum.

Blouin et al. (2006) assert that e-education is one of the most significant uses of multimedia technology in healthcare. They point out, however, that developing countries do not participate at the level at which the industrialised countries are participating in e-health, owing to several reasons. The most important reason is the lack of the telecommunications infrastructure that is necessary to support e-commerce in general and e-health in particular. A developed ICT infrastructure will need to be supported by relevant ICT policies that can deliver, among others, higher internet usage through reduction in internet connectivity costs, which are generally significantly higher, especially in African countries. Blouin et al. (2006), therefore, argue, that developing countries may not have comparative advantage in e-health (cross-border supply). However, comparative advantage for the developing countries could be found in niche areas such as medical transcription, health insurance processing, data mining and storage. Arunanondchai & Fink (2007) found that the Philippines had a comparative advantage in medical transcription due to the existence of a pool of educated English-speaking workers. The medical transcription sector in the Philippines is also supported by the government's FDI programme that offers special incentives to foreign companies setting up in the country. In Singh (2003) as cited in Blouin (2006), medical transcription has also been found to be growing into a large export industry in India. Further, Singh (2003) was cited in Blouin et al. (2006) as having found that in 2003, India had 25,000 people employed in the medical transcription industry. It has been estimated that 47 percent of the US hospitals outsourced their medical transcription to India (Kshetri & Dholakia, 2011).

The challenges relating to harnessing opportunities in e-health, especially for developing countries extend to the need to develop policies that cover standards and certification to ensure authenticity and safety of the services, ethical and privacy issues, regulatory issues relating to delivering services through the internet and legal and insurance issues relating to the rendering and receiving of online services (Blouin et al., 2006). It will be necessary, for

instance for a country like Botswana to develop a full-fledged e-health policy that is supported by strategies to develop the necessary ICT infrastructure as well as privacy laws.

2.3.2 Consumption Abroad (Mode 2)

Article I.2(b) of the GATS defines Mode 2 as "..... the supply of a services in the territory of one Member to the service consumer of any other Member" (World Trade Organisation, 2002). In the case of health services, it involves the movement of the consumers of the health services to the location (territory) of the service providers, for example, for diagnosis and/or treatment. Lee & Spisto (2006) refer to this type of movement as "medical and healthcare tourism". These voluntary movements, however, can either be out of dire need in cases of lack of expertise, capacity, equipment or facilities in the importing country or could be as a result of consumers seeking luxurious, non-essential health services such as cosmetic surgery. Bernal (2007) and Blouin et al. (2006) posit that this mode of delivery is the most important in the international trade of health services.

Despite that consumption abroad is the most important mode of supply of health services, it is also very difficult to estimate expenditures by consumers travelling abroad explicitly for healthcare; the BOP statistics do not adequately cover these data (Blouin et al., 2006; OECD, 2011). Perhaps, for a country that seeks to develop the health sector to attract foreign patients or augment domestic services through imports, or substitute imports with domestically provided services, it will be important to collect and monitor better BOP and tourism statistics, especially on components relating to reasons for travel and expenditures items and patterns while travelling abroad or within the country.

Policies and regulatory framework necessary for sending countries should include not only undertaking commitments under Mode 2 but should also include extending access to citizens through flexible and portable government and private medical insurance coverage (Blouin et al., 2006; Mattoo & Rathindran, 2006). For developing countries that seek to develop their healthcare systems to attract foreign patients, proximity and price differentials to the potential market is also an important factor (Bernal, 2007; Blouin et al., 2006; Lautier, 2013). Lautier (2008, 2013) found that Tunisia's good performance in the exports of health services was boosted by its proximity with Europe as the demander. In a similar fashion, Bernal (2007)

Jamaica's proximity to the USA resulted in increased exports of health services for the island state. Hence, improving competitiveness of the healthcare system and identifying potential proximal markets for the services should perhaps be part of the strategies of especially developing countries seeking to develop exports of health services through Mode 2.

2.3.3 Commercial Presence (Mode 3)

Commercial presence (Mode 3) of delivery of services is defined in Article I.2(c) as "..... the supply of a service by a service supplier of one Member through commercial presence in the territory of any other Member" (World Trade Organisation, 2002). Commercial presence involves the establishment of medical facilities such as hospitals, clinics, diagnostic and treatment centres in the importing Member State (Chanda, 2002). The facilities that are set up in importing countries would mostly be subsidiaries, branches, representative offices, joint ventures, partnerships or acquisitions by existing companies in exporting Member States (Cattaneo, 2009; Herman, 2009). This mode is manifested in the flow of FDI (Herman, 2009). Blouin et al. (2006), Smith (2004) underscore the necessity to define FDI in health services, including any restrictions on the types of legal entities and limitations on the participation of foreign capital of value of investment. Further, they emphasise the need to distinguish between 'for-profit' FDI (which is usually purely commercial and associated with foreigners) and 'not-for-profit' FDI (which is usually associated with the non-resident Diaspora seeking to improve the health situation in their homeland). Hence, it may be beneficial to also disaggregate FDI between non-resident nationals and foreigners in order to draw "..... policy directions for tapping Diaspora networks for getting FDI in health" (Blouin et al., 2006).

While Herman (2009) observes that the United States dominates as the source of FDI for health services, Chanda (2002) brings out the growing trend of acquisitions and joint ventures in Asia and Britain particularly by companies based in Singapore. In southern Africa, South Africa is emerging as an important investor in foreign countries through companies such as Netcare, which has made successful acquisitions in the United Kingdom and some African countries (Cattaneo, 2009). An observation has also been made, however, of growing investments by healthcare FDI by both developed and developing countries (Cattaneo, 2009).

Commercial presence can be of great benefit to developing countries by augmenting their inadequate health facilities through investments that could otherwise not be met through public or local private resources. The liberalisation of Mode 3 can also benefit countries that wish to develop exports of health services through other modes of supply (Smith, 2004). For instance, for a typical developing country with an underdeveloped healthcare sector, FDI may enhance its ability to improve access to healthcare by offering health services, not only for the local population but for foreigners as well. Blouin et al. (2006) point out that FDI may result in a two-tier health system which may bring about the negative manifestations associated with commercialisation and trade liberalisation of health services. Such negative consequences include reallocation of resources (including human, resources through internal brain-drain) from the public to the private sector, with the potential to impede access to health services, especially by the poor sections of the society (Achouri & Achour, 1998; Arunanondchai & Fink, 2007; Cattaneo, 2009). However, Smith (2004) posits that the additional resources from the FDI in health may lead to public sector resources being released to improve healthcare for the poor, with the wealthy paying for the services offered by the new foreign healthcare facilities. He emphasises, however, that such FDI would necessarily be through construction, thus creation of new productive capacity, as opposed to FDI through purchase, which could entail only change of ownership of existing productive capacity.

In crafting policies for attracting FDI generally, and into the healthcare sector in particular, it will also be of interest to countries where the FDI is to be channelled and what incentives are provided to get investment where it is needed. The needs of a country should help to determine whether the FDI is needed in the establishment of, for instance, hospitals or other areas such as institutions, health insurance or health education. It is therefore, important to establish whether a national investment promotion agency exists, whether a national FDI promotion strategy is being pursued and whether there exists a separate strategy for attracting FDI into the healthcare sector (Blouin et al., 2006; Smith, 2004). Establishing the relationship between the general national FDI strategy and the specific healthcare sector FDI promotion strategy as well as between the key institutions (government ministries) pursuing them is also crucial in order to guide policy interactions between trade and investment on one hand and healthcare sector and its consequential delicateness on the other.

The above issues are very relevant to Botswana, where national investment and export strategies exist (Government of Botswana, 2009c, 2010) and also a national investment promotion agency; the Botswana Investment and Trade Centre (BITC), has been established. Further, an institution in the form of the Health Hub has been established to pursue objectives related to attraction of FDI in the healthcare sector (Government of Botswana, 2008; <http://www.gov.bw/en/Ministries--Authorities/Ministries/MinistryofHealth-MOH/The-Masters-Office112/>). A relationship, will need to be established, especially between the general FDI promotion strategy and the one being pursued by the Health Hub. In addition, relationships between the institutions implementing the general national FDI strategy (especially the Ministry of Trade and Industry – MTI and BITC) on one hand and the Ministry of Health – MoH (and the Health Hub) on the other hand will need to be understood bearing in mind their varied objectives.

2.3.4 Movement of Natural Persons (Mode 4)

Article I.2(d) of the GATS defines Mode 4 as "..... the supply of a service by a service supplier of one Member, through presence of natural persons of a Member in the territory of any other Member" (World Trade Organisation, 2002). For this mode of service delivery to take place, therefore, the service supplier has to move from their country of residence to the location/country of the consumer. Blouin et al. (2006) and Butkeviciene (2002) observe that the GATS definition is broad, covering virtually all occupations, skills levels and qualifications levels. Nevertheless, in practice, it has been observed, the WTO member countries limit their commitments to "..... the higher skilled, usually managers, executives and specialists" (Nielson, 2003). As cited in Blouin et al. (2006), Nielson (2002) presents the coverage of Mode 4 as:

- self-employed or independent service suppliers (paid by host country);
- employees of a foreign company who are sent to fulfil a contract with a host country client
- employees of a foreign company established in the host country; and
- business visitors (short-term stays, no remuneration received in host country).

Butkeviciene (2002) suggests that the defining elements of Mode 4 on the service supplier are that, (1) their intended purpose of entry into other Members' territories should fall under

the provision of services in one of the industries classified as services sectors by the WTO and (2) they should be seeking "non-permanent" entry and "temporary" stay for the supply of services abroad. Nielson (2003) emphasises that the migrants under Mode 4, gain entry into the host country for a specific purpose; are confined to one sector; are not migrating on a permanent basis and are not seeking entry into the labour market of the host country. However, there exists no universal definition of the length of time for the "temporary" stay of the service suppliers; it is left to each Member State to impose its own definition when undertaking GATS commitments, which may tend to be a few months to several years (Blouin et al., 2006; Butkeviciene, 2002).

It has been observed that movement of healthcare personnel constitutes a sizeable proportion of trade in health services (Cattaneo, 2009; Chanda, 2002). The direction of trade through this mode is mainly from the south (developing) to the developed (north) countries (Lautier, 2013; Grignon, Owusu, & Sweetman, 2012; Cattaneo, 2009; Herman, 2009; Stilwell et al., 2004; Chanda, 2002).

There is generally difficulty in obtaining reliable data on Mode 4 for countries and between countries for purposes of comparison (Nielson, 2003). Butkeviciene (2002) opines that the available statistics collection systems are inadequate to measure the full extent of movement of persons and suggests the drawing of some elements from the BOP statistics, systems of national accounts, UN Statistics of International Migration and International Labour Organisation's employment statistics. According to Butkeviciene (2002), therefore, it has become necessary to augment the existing sources of data with "... administrative records of controlling and regulatory agencies as well as of institutions and establishments, in addition to surveys of travellers and residents". In the case of Botswana, the BOP statistics are highly aggregated; only showing aggregated income earned by Botswana citizens abroad and income earned by non-residents in Botswana; they do not show disaggregated sectoral contributions by income and by service suppliers. Thus, the dearth of data on Mode 4 applies to Botswana, including in the healthcare sector. Further, there are no periodic surveys for Mode 4 needs, on an economy-wide or sectoral basis. The available alternative source of data for this research would have been the labour statistics compiled by the national statistical authority, Statistics Botswana, which are also highly aggregated and thus provide very little information on Mode 4 on the healthcare sector.

2.4 Health and Trade Policy Nexus

Discussions on trade in health services include debates about the potential impact of trade liberalisation on the local populations' access to health services. It is about whether trade will enable countries, especially developing ones to improve or worsen their peoples' access to healthcare. Different authors have looked at the relationship between trade policy and health policy. Davis & Erixon (2008) observe that arguments against the liberalisation of trade in health services is premised "... on the populations entitlement to enjoy the "fundamental human right" to healthcare.....". The enjoyment of this "fundamental human right", it is argued, is threatened by the motive of the profit-making private businesses which are at odds with the interest of the society to have access to health services. The actions of the private businesses is enabled by trade liberalisation, which essentially leads to more services being in the hands of the private providers (Arunanondchai & Fink, 2007; Davis & Erixon, 2008; Mashayekhi & Tuerk, 2010; Price, Pollock, & Shaoul, 1999; Sexton, 2001). On the other hand, however, it is acknowledged that trade liberalisation does have potential benefits to the society, the businesses operating in the healthcare sector and the economies of the countries involved.

2.4.1 Potential Benefits and Costs of Liberalisation of Trade in Health Services

The gains or costs associated with liberalisation of trade in health services is looked at from both exports and imports angles. Benefits from liberalisation of trade in health services include the potential of health services exports to being a source of foreign exchange and the sector playing a role in export and economic diversification strategies of countries (Arunanondchai & Fink, 2007; Benavides, n.d.; Cattaneo, 2009; Davis & Erixon, 2008). Some countries actively promote the development of exports of health services and seek market access for them. Price et al (1999) observe that such strategies are backed by transnational and multinational corporations in the case of some European countries and the USA. Even in developing countries, deliberate efforts, through strategies are used to promote exports of health services, with the hope to reap the benefits of growth and diversification (Cattaneo, 2009; Chanda, 2001, 2002; Lautier, 2008, 2013; Obayashi & Sanogo, 2009; Prosser, 2006). In the case of Botswana, health is seen as one of the sectors that could

contribute to economic growth and diversification through offering health services to the regional market (Government of Botswana, 2008).

Liberalisation of health services could also increase access to health services and alleviate shortages, especially in most developing countries (Arunanondchai & Fink, 2007; Cattaneo, 2009; Mashayekhi & Tuerk, 2010). FDI in the health sector, for instance, helps release some resources to be invested in other areas of the health system such as programmes for preventative care or primary health services. FDI in healthcare also results in positive externalities through the introduction of more effective managerial skills and new technologies; all these with positive effects on access to health services (Arunanondchai & Fink, 2007; Davis & Erixon, 2008).

Despite the benefits associated with liberalising trade in health services, there are instances that it can have risks and potential negative effects on access to healthcare. Liberalising trade in health services, it is argued, opens up the health sector to global competition and participation of the private sector, altering the structural make-up of the health sector and prices. The private health services resulting from liberalisation and increase in FDI are usually accessible to foreigners at the expense of the locals and the rich at the expense of the poor (Arunanondchai & Fink, 2007; Cattaneo, 2009; Chanda, 2001; Davis & Erixon, 2008; Mashayekhi & Tuerk, 2010; Price et al., 1999; Sexton, 2001; World Trade Organisation, 1998). Davis & Erixon (2008) argue that because liberalisation makes the health sector more profitable, it attracts the participation of the private sector whose motive is profit-making (business/commercial interest) as opposed to promotion of access to the quality health services (societal interest).

Further, Sexton (2001) observes that government policies such as privatisation, competition and public procurement enhance and entrench participation of the private sector in the provision of health services, thus exacerbating the negative effects on access to society. The increase in private sector participation leads to the creation of a dual system of provision of healthcare services, especially through hospitals; one that is commercial and privately-owned and the other that is government-owned. The World Trade Organisation (1998) observes that in many countries, both government-owned and privately owned hospital facilities, ".....

operate on commercial basis, charging the patient or his insurance for the treatment provided".

Benefits of liberalisation are also associated with temporary movement of health workers on host countries. Foreign health workers alleviate shortages in human resources in healthcare, which has a bearing on access to health services. While shortage of healthcare professionals is being experienced especially by developed countries (Davis & Erixon, 2008), particularly in the remote areas, developing countries also suffer the same problem (Cattaneo, 2009). In the context of sending countries, however, movement of health professionals may lead to both internal and external brain-drain and a loss of public investment on education and training of the health workers, with negative effects on access to health services by the poor and other vulnerable groups (Cattaneo, 2009; Missoni, 2013). Bothoko (2013); Ganetsang (2010) and Mmolai (2013) reported in Botswana's local newspapers of serious shortage of doctors due to Botswana doctors working outside the country.

Further, several authors observe that countries sending health workers derive benefits in terms of remittances and transfers to their home countries (Benavides, n.d.; Cattaneo, 2009; Chanda, 2001, 2002; Grignon, Owusu, & Sweetman, 2012; International Organisation for Migration, 2005; KategekwaJoy, 2008; Loewenson, Tayob, Wadee, Makombe, & Mabika, 2007; Sexton, 2001; Stilwell et al., 2004; World Trade Organisation, 1998). Dovlo (2007) has found that in the case of some Sub-Saharan African countries, such remittances can be substantial and even surpass official development assistance. Kingma (2007) found that the remittances tend to have a positive effect by reducing poverty levels in low income countries that export nurses. He also cites the OECD (2002) that points to evidence that the remittances also adequately compensate for the economic losses occasioned by the departure of the health workers. However, most of the available literature extensively cover the migration of nurses as opposed to other health professionals. Very little work has been undertaken in the case of Botswana to determine the impact of the movement of healthcare workers, including nurses. A study by Sinha & Onyatseng (2012) does not address the issue of remittances.

Another benefit associated with movement of health workers is the exchange of skills and knowledge and upgrade of standards in the source countries, assuming that those working in the diaspora return to work in the local healthcare systems after gaining experience and

acquiring capital to reinvest in their home countries (Buchan & Sochalski, 2004; Chanda, 2001, 2002; Kingma, 2007). However, Blouin et al. (2006) argue that developing countries' health workers are more unlikely to return, resulting in permanent loss of skills and investment in education and training. In the case of Botswana, studies have not been undertaken to assess this potential benefits, pointing to the gap in research in this area.

2.4.2 Trade Agreements and Health Services

Trade arrangements play an important in the provision of health services across countries. Available literature shows that the inclusion of health in trade agreements is relatively limited at both international (Cattaneo, 2009; World Trade Organisation, 1998a), and regional (Holst, 2009) levels. Adlung & Carzaniga (2002) show that as in July 2000, 54 countries had made commitments on medical and dental services, 29 under nurses and midwives, 44 under hospital services and only 17 under other human and health services. The literature raises concerns about the possible risks that liberalising trade in services might bring to access to health services. The gist of the concern is that liberalisation tends to lead to the infusion of market-based outcomes in the provision of health services. The possible negative effects of liberalisation, in particular on African economies, according to (Machemedze, 2005) will be to perpetuate the outcomes that were brought about by the Structural Adjustment Programmes, including,

".....increased cost recovery for health care; a growth in private and voluntary provision; falling public budgets for health care; a shift in spending from preventive to curative services; increased commercialisation of public services and out of pocket charges (fees) for public health services; a shift in government role away from direct provision with more contracting out of services to providers and liberalisation of health insurance and a shift to insurance for different groups, pre-paid plans and user charges, rather than tax-based financing."

Thus, some authors advise that decisions to liberalise trade in health services be guided by, at best, the possibility of improving access to healthcare as opposed to worsening it (Arunanondchai & Fink, 2007; Drager & Fidler, 2004; Holst, 2009; Machemedze, 2005). Loewenson et al. (2007) suggest that governments should take informed positions when making commitments in trade arrangements and that in cases where there are possible

conflicts between trade agreements and public health obligations, public health obligations should take precedence.

2.4.3 GATS Provisions on Health Services

Like in other WTO agreements, the GATS provides for countries to schedule commitments as a result of outcomes of negotiations with other WTO Members. Cattaneo (2009) points out that there are provisions in the GATS that could be used to ensure that WTO members' ability to maintain or even improve access to health services is not eroded. Drager & Fidler (2004) argue that the GATS commitments allow for flexibilities in that they do not oblige countries to liberalise health services "... if they do not wish to do so." However, the general lack of capacity, especially by developing countries, to effectively negotiate trade agreements should be borne in mind. It is compounded by the dearth of analysis of the health sectors in most developing countries as well as limited understanding of the healthcare sectors, relationships between trade and health and the possible impacts trade liberalisation would have on the provision of healthcare (Mashayekhi, Julsaint, & Tuerk, 2006).

Further, through Article I.3 (b) and (c)³, GATS provides for exclusion from coverage services that are "..... supplied in the exercise of governmental authority". The GATS defines a service supplied in the exercise of government authority as a "..... service supplied neither on a commercial basis nor in competition with one or more service suppliers" (World Trade Organisation, 2002). Pollock & Price (2000) observe that it is difficult to see how this provision excludes health services because "..... in most countries, health services involve competition and commercial provision." Further, Drager & Fidler (2004) argue that the scope of exemption provided by these GATS provisions is ambiguous and controversial and should be closely scrutinised by governments, which may have led to some countries "..... not to undertake commitments at all" and "... others to narrow the scope of commitments to the commercial segment only.". Sexton (2001) also argues that the GATS definition of government services as per Article I.3 is narrow and that the exemption it provides "..... could

³ Article 3.5 (a) and (b) of the SADC Protocol on Trade in Services contains, verbatim, the provisions of GATS Article I.3 (b) and (c) (SADC Secretariat, n.d.).

be meaningless if one Member were to challenge another Member's public services at the WTO dispute panel as contravening the GATS".

Furthermore, according to Sexton (2001), if for profit or voluntary companies supply health services that are also provided by government, then such services could be judged by a WTO dispute panel as not being government services, thus not qualifying for exemption from the GATS and hence subjected to competition from foreign services suppliers. This view is supported by Pollock & Price (2000) who argue that if it were to be constituted, a WTO panel will likely uphold a narrow definition of public service on healthcare owing to the decision of the WTO Council of 1998 on the matter. They assert that the WTO Council minutes can be used by dispute panels to settle disputes brought before them.

Box 1: Minutes of the Meeting of the WTO Council on Trade in Services Held on 14 October 1998

The WTO Council for Trade in Services meeting on 14 October 1998 pronounced as follows concerning applications of the exceptions of Article I(3) on health and social services:

"Members drew attention to the variety of policy objectives governing the provision of health and social services Such considerations had led to a very substantial degree of government involvement, both as a direct provider of such services and as a regulator. However, this did not mean that the whole sector was outside the remit of the GATS; the exceptions provided in Article I:3 of the Agreement needed to be interpreted narrowly. On the other hand, Members also noted increasing possibilities for private sector participation, whether domestic or foreign, in various health and social-related activities. Recent technical developments, including in the area of tele-medicine, had created new possibilities for trade. Given that all modes of supply had been gaining importance, several Members felt that there was significant scope for widening and deepening commitments in this sector."

Source: World Trade Organisation (1998b)

However, Adlung & Carzaniga (2002) posit that the exemption provided by Article I.3 is relevant in the health sector; provision of free treatment in a country's public hospitals qualifies a service to be defined as a government service. They argue that the coexistence of governmental and private services should not be a factor to be used to make a service lose its status of government service. They assert, "it would be absurd to believe, for example, that the availability of private medical or private security services in a country would require the government to commercialise its public hospitals or police." The dual existence of private and public health facilities applies to Botswana, with the growth of the private sector having

been realised over the years, owing to the establishment of private hospitals, the most recent addition having been established only in 2009. Whether or not the provisions of Article I.3 provide adequate exemption of health services should remain the subject that perhaps will in future be dealt with by a WTO dispute panel from which a legal precedent will be obtained.

The significance of the definition of what is commercial or provided in a competitive environment in line with Article I.3 is especially relevant to Mode 3 of supply of health services. This is because Mode 3 is essentially FDI driven and FDI is by nature commercial and its inflow into a country may completely commercialise the healthcare sector and bring about undesired consequences that are centred on the local populations' access (or lack thereof) to health services (Blouin et al., 2006; Pollock & Price, 2000; Smith, 2004).

2.5 Direction of Trade in Health Services

Trade in health services has for a long time featured mainly in the developed countries as exporters and the developing countries as importers. The major modes of delivery involved have been the movement of foreign healthcare professionals between countries (Mode 4), and through the presence of foreign healthcare firms in importing countries (Herman, 2009). Lautier (2008), whose paper focuses on the exports of services by a developing country, Tunisia, notes the increasingly changing pattern, whereby the flow of exports of health services from the developing to the developed countries was through consumption abroad.

Cattaneo (2009) observes that developing countries are increasingly offering attractive medical tourism services through surgery, recuperation and rejuvenation holiday packages. Hence, there are examples of exports from the developing countries to the developed countries such as in the case of the European patients accessing health services in Tunisia (Lautier, 2008) or US patients accessing health services in Jamaica (Bernal, 2007). This trade, also projects the potential of trade in health services between the developing countries (south-south trade). There is the example of Tunisia, where Libyans represent more than 80 percent of foreign patients and the case of India which treats more than 80 percent of Omani patients (Cattaneo, 2009). The case of Tunisia and Libya is corroborated by Lautier (2008) who found that out of about 42,000 patients treated in Tunisian private clinics in 2003, about 34,000 came from Libya, which accounted for 81 percent of foreign patients and 81 percent

of export value of health services. Perhaps the case of India and Oman is indicative of a possible overreliance on foreign health services (imports).

The factors influencing the change in the direction of trade from south to north have been found to include the improvement of the medical skills in developing countries, thus making the quality of services offered as competitive as in the developed countries (Lautier, 2008). In addition, the issue of vast cost differentials is important in terms of making health services in developing countries more attractive (Lautier, 2008, 2013; Cattaneo, 2009; Herman, 2009; Bernal, 2007; Mattoo & Rathindran, 2006). These differences in costs can be very wide for some medical procedures, such as in the case of heart valve replacement, which in 2008 would cost US\$ 160,000 in the USA compared to US\$ 12,500 in Singapore, US\$ 10,000 in Thailand and only US\$ 9,000 in India (Cattaneo, 2009). Lautier (2013) also presents differences in costs of some medical procedures; for example, it cost US\$ 43,000 for hip implant and US\$ 40,000 for knee replacement in the USA while it cost US\$ 3,000 and US\$ 3,500-4,000 respectively for the same procedures in Tunisia. While the costs in the United Kingdom were not as high as in the USA, they were still higher than in Tunisia, Turkey, Thailand and India.

The demand for health services in developing countries could be explained by what Lautier (2013) refers to as, "patients whose trip is motivated by economic calculations and who seek treatment that is similar but cheaper than treatment at home". Bernal (2007) posits that the positive conditions in developing countries could be complemented by closer proximity to developed countries, such as the case of Jamaica which enjoys proximity to some major cities in the USA. The proximity of Tunisia to the European countries to which it exports health services has also been established by Lautier (2013) as the main driver of demand. Further, Bernal (2007) reckons that the higher level of development and attractiveness of the tourism sector in the exporting developing country (in this case, Jamaica) presents an opportunity to successfully market health services to patients in the developed country (the USA). In some cases, patients are found to combine travel for medical and tourism purposes in what has been referred to as "sun, sea and surgery" (Prosser, 2006). This indicates the necessity for complementarities between services sectors in order to enhance the success of the other. Lautier (2013) brings in the transport services sector as another success factor to improve the competitiveness of both health and tourism sectors.

However, there are possible barriers to trade in health services. In the case of Tunisia which is able to attract patients from Europe, Lautier (2008) cites as possible major entry barriers, the absence of after-care capacity when the patient is back home and the lack of guarantees. Another factor that inhibits trade in health services has been found to be the lack of health insurance coverage of patients when they receive treatment abroad. Mattoo & Rathindran (2006) cite the example of the USA where most health insurance plans do not cover treatment abroad and in the same light, Lautier (2008) presents the example of the "non-portability of the health insurance" in relation to the EU and its effect on curtailing exports of health services from Tunisia to Europe. In order to curb the negative effects that the health insurance plans have on demand for health services abroad, Lautier (2013) suggests that the agreements on mutual medical coverage and/or temporary transportability of social insurance for visitors and tourists could be a solution to the non-portability of health insurance. Mattoo & Rathindran (2006) argue that health insurance plans should be modified in order to realise the higher benefits of improved access to health services abroad, that include cost efficiency and broader consumer choice.

The issues raised by the literature about the direction, magnitude and estimated value of trade in health services are barely understood in the case of Botswana. Whether the changing pattern of trade that involve the developing countries has affected Botswana as an importer or exporter has not been explored. Further, what also needs to be assessed is the impact that the proximity of Botswana to South Africa, a developing neighbour, has had on the direction of trade in the context of south-south trade observed by other studies.

2.6 Trade in Health Services in Botswana

Literature and data in general health services in Botswana do exist. The national statistical authority, Statistics Botswana, publishes data sets on healthcare issues based on surveys on healthcare facilities, healthcare personnel and access to pharmaceutical drugs. Further, other institutions, such as the Botswana Health Professions Council (BHPC), the Nursing and Midwifery Council of Botswana (NMCB) and the Botswana Nurses Union (BONU) in implementing their legal mandates or undertaking their activities on behalf of their members do have statistics on the healthcare personnel in the country. Some of these data are used

under the subsequent chapters to show the extent of trade (exports and imports) especially under the Mode 4 (Movement of Natural Persons).

However, scanty trade data exists and very little has been written about trade in health services in Botswana. The BOP statistics by the central bank, Bank of Botswana, are highly aggregated and thus do not show much on the different component activities. te Velde & Cali (2007) narrated the shortcomings of the BOP statistics, including that because of the way they are collected, they are likely to capture modes 1 and 2 transactions but also likely to omit transactions for modes 3 and 4. The unreliability of the BOP statistics, they argue, has been exacerbated by the elimination of foreign exchange controls earlier in 1999, which removed the obligations on the part of customers of commercial banks to specify the nature of transactions in foreign currencies. Thus the BOP statistics are not only highly aggregated but are by and large inadequate. They cannot be relied upon even to make wild estimates of trade in any particular sector, including health services. Targeted surveys or studies will have to be conducted to collect these data to appreciate trade in health services.

The few existing documents, mostly unpublished work that relating to trade in health services are mostly related to Mode 4, that is, movement of natural persons. This literature is briefly reviewed below.

During the 2000s, perhaps at the peak of the impact of HIV/AIDS in Botswana, indications were made of the strenuous effect of the disease on healthcare workers, necessitating the engagement of expatriates to supplement the local workforce. It was further observed that failure to attract health professionals, especially doctors and specialists posed a serious threat to the ability of Botswana as a country to deliver health services. Reliance on expatriate doctors and specialists, which was estimated at over 80 percent of total staff in healthcare was seen as posing a risk due to the difficulty to attract them from the international market, owing to the high demand for them across the world (Ministry of Health, n.d.). Most of the available work, however, has been on the migration of nurses in particular (Botswana Nurses Union, n.d.; Sinha & Onyatseng, 2012; te Velde & Cali, 2007; Thupayagale-Tshweneagae, 2007a, 2007b). Nevertheless, not much is known about the extent of the nurses' migration, the value of the exports and the impact of the remittances from the nurses who are working abroad. The studies generally depended on estimates based on secondary data to show the extent of the

migration (Thupayagale-Tshweneagae, 2007a) and surveys on government health facilities, whose level of response was fairly minimal (Botswana Nurses Union, n.d.). No study was found that estimated the value and impact of remittances from the nurses who had migrated.

2.6.1 Migration of Nurses and Midwives

Data on migration of nurses from Botswana is sketchy. The two institutions, the Nursing and Midwifery Council of Botswana (NMCB) and the Botswana Nurses Union (BONU), which would presumably be the custodians of data on the migration of nurses and midwives do not compile these data. Therefore, the only sources of the data are secondary sources in the form of studies and existing statistics from surveys that have been conducted in the past on the subject.

Data in the past studies and surveys indicate that some nurses and midwives have in the past left the country to work in other countries. Some of the studies and survey that were mostly undertaken during the 2000s were prompted by the negative impacts of the HIV/AIDS pandemic on the healthcare workforce and perhaps the decision by some workers, including nurses and midwives, to move abroad and work in other countries. Sinha & Onyatseng (2012) found that nurses in Botswana display a high propensity to migrate to other countries in search of better working conditions. It was during the 2000s that the effects of the HIV/AIDS pandemic were at the highest level, especially before the burden could be meaningfully reduced by the rolling out of free anti-retroviral (ARV) therapy. The study by (Thupayagale-Tshweneagae, 2007a) on migration of nurses from Botswana, had one of its objectives, being to "assess whether the HIV/AIDS pandemic has any influence on the migration of nurses". The study found that the resultant increased burden of work from HIV/AIDS led to burnout on the part of some nurses and thus leading to migration.

2.7 Methodological Approaches to Analysing Trade in Health Services

The dearth of data and the difficulty to measure trade in health services across the modes of supply have been explored (Butkeviciene, 2002; Mashayekhi et al., 2006; Smith, Blouin, & Drager, 2006; World Health Organisation, 2005a, 2005b). Further, the inadequacy of the conventional sources of data such as the BOP statistics to estimate trade in health services has

been emphasised by among others, (Blouin et al., 2006; Butkeviciene, 2002; OECD, 2011; te Velde & Cali, 2007). (Lautier, 2013) acknowledges the utility of the International Monetary Fund BOP statistics (IMF BOPS) but cautions that they are incomplete and most probably understate the real volume of trade flows. Also, other countries do not provide data to the IMF for this item. This source of data is unlikely to be helpful in the case of Botswana where the domestic source of the BOP statistics, the central bank has been found to produce statistics that are highly aggregated to assist in the analysis of the services sectors (te Velde & Cali, 2007).

Thus some authors justify the necessity for country case studies through surveys and health sector assessments (Lautier, 2013; Mashayekhi et al., 2006) and some international institutions, have invested in developing comprehensive methodological frameworks to guide the conducting of country-level surveys and studies on trade in health services (Chanda & Smith, 2006; OECD, 2011; World Health Organisation, 2005a, 2005b). The frameworks endeavour to extensively cover all the necessary elements of data collection. For instance, the OECD highlights the existence of numerous third party payments for health services from public sources and private health insurance, which surveys should account for (OECD, 2011).

Lautier (2008) conducted a country field survey to "... evaluate the value as well as the structure of exports....." in Tunisia. He also analysed the impact on the Tunisian economy in terms of output, foreign earnings and employment. His findings highlight the importance of Tunisia's regional neighbours as the major demanders but that there are also exports that go outside the region, especially to Europe. The survey by Lautier (2008) does not give the benefit of the approaches he embarked on, such as the questionnaires and the sampling procedures. However, what is significant is that the a national survey was necessary to augment the existing sources of data which included the BOP statistics and the Tourism Satellite Account statistics.

2.7.1 OECD Approach to Estimate Trade in Health Services⁴

⁴ The OECD approach is contained in a report titled "Improving Estimates of Exports and Imports of Health Services and Goods Under the SHA Framework", produced in June 2011.

When fully developed and operational, the OECD System of Health Accounts (SHA) will provide compiled data on health services and goods from a range of sources, including, Extended Balance of Payments Services (EBOPS), enterprise and business surveys, household and tourist surveys, established government administrative institutions, health insurance funds/schemes, retail and e-commerce sources, annual reports of public healthcare purchasing authorities, ministries of health and administrative agencies keeping health care records of population groups such as refugees, military personnel and overseas embassy staff. The variables will also be wide-ranging, the most important feature being that the data will disaggregate numbers and expenditures between residents and non-residents to allow for the determination of exports and imports.

The OECD framework assumes the existence of well functioning administrative mechanisms in the concerned countries to have the capacity to compile the data of the elements of the framework. This is unlikely to be the case in developing countries, including Botswana where it has already been emphasised that data in this subject are rather scanty (te Velde & Cali, 2007). However, the OECD framework would be very helpful as a guide to countries that wish to develop their own framework for compiling data and conducting assessments of the impact of trade in services. Further, the OECD framework could assist in drawing elements for undertaking country-level surveys and identifying data sources for compiling data from within the country, including in Botswana and specifically for this study.

2.7.2 WHO's Guide for Conducting Country Studies

The elements of the WHO methodological approaches to assessing trade in health services are presented in two instances. The ethos of the two is related, the main objective being to make the methodology broad-based enough to capture all the direct and indirect factors that have a bearing on trade in health services. The first one is based on the WHO work in the Eastern Mediterranean region, where a methodology was developed to undertake country-specific studies in 10 countries of the region (World Health Organisation, 2005a, 2005b). The second one is presented in Chanda & Smith (2006) but was not for a region. The outline of the framework covers two aspects: (1) the contextual background, which addresses the macroeconomic and trade environments as well as the state of the domestic healthcare system and (2) trade flow figures in services according to the four modes of supply; it also includes

elements related to institutional, legislative, regulatory, infrastructural, overview of GATS commitments and other elements relevant for the assessment of trade in health services. The framework can be tailored for specific countries or specific purposes, including the magnitude of the assessment. That is, other areas can be excluded to reduce the coverage and size of the study to suit the objectives of a particular study and the resources available.

Like the OECD framework, the WHO framework provides for identification of possible sources of data and information for all the elements covered. The two frameworks, therefore, can be used complementarily to develop a methodological framework tailored for specific purposes. The OECD framework was developed to cover both goods and services in the healthcare sector, hence, one would discard elements applicable to goods; for instance, in conducting surveys, enterprises manufacturing or importing, exporting or selling healthcare goods would not be covered unless there are significant services components among their business processes.

2.7.3 Choice of the WHO Framework

The WHO framework is an attractive choice because of its broad-based coverage through its inclusion of macroeconomic background, trade environment, institutional, legislative, regulatory and infrastructural factors as well as GATS commitments. It also provides prototype questions to assist in the construction of questionnaires for gathering data. This study, therefore, borrows from the WHO framework in terms of the approach for collecting data. It is used to guide in the identification of the institutions from which to obtain data and conduct interviews to fill the gaps in data as well as gather insights on trade and health policies, strategies, institutional arrangements, legal and regulatory frameworks and how these factors impact on trade in services and access to healthcare. However, brevity was necessary to control the scope of the study. A full-fledged application of the framework would need more resources and much longer time. Thus, in constructing questions for field interviews, only the major elements were taken and the lengthy detail sought by other questions were excluded. Also, the persons selected for interviews excluded the political leadership mainly because it would have been difficult within the short period of the study to have audience with them. Further, the timing of the study coincided with the national general elections, during which period the political leadership are busy canvassing for votes.

2.8 Conclusion

The literature establishes a case for the importance of trade in services, including health services. In particular, it is observed that countries, especially developing countries, including Botswana endeavour to use deliberate policies and strategies to develop the health services exports to diversify exports and the economy. Nevertheless the dearth of data and information and general understanding of the health sector and even the more trade in health services exists, including in Botswana. This calls for more research and building of data sets to guide policy, strategy and negotiations in trade in health services. The methodological approaches to conducting comprehensive analysis on trade in health services especially in the developing countries' context point to the utility of the WHO guide to conducting country studies. This study has chosen to use some aspects of this guide to identify sources of data and information on trade flows of health services. Further, document review and insights gathered from identified institutions and individuals are used to draw lessons on the opportunities and challenges for trade in health services in Botswana.

3 METHODOLOGY

This chapter presents the methods used to collect the data and to analyse it. It also explains the approach for identification of sources of data and thus selection of institutions for interviews.

The methods employed in this study are both quantitative and qualitative. Published and publicly available quantitative data have been collected from several institutions to present the macroeconomic and trade overview as well as the country's healthcare system. The quantitative data were also obtained to estimate trends in direction, magnitude and value of trade in services according to mode of supply. Quantitative data have been supplemented with qualitative data obtained from sources (policy and strategy documents) and interviews with selected participants in relevant institutions, ranging from policy makers in the Ministry of Health, hospital and laboratory managers, to administrators of health insurance schemes among others. All the data were analysed to achieve the objectives of this study.

3.1 Approaches to Collection and Analysis of Data and Information

3.1.1 Methods of Collecting Data and Information

The intention was to use existing data to achieve the objectives of this study. Some data were publicly available for certain areas of the study but unavailable for some; some of the data were aggregated and would not address the issues being investigated by the study. It was necessary, therefore, to collect some of the data to fill the gaps. Areas from where to collect the missing data were identified partly through the WHO guide for conducting country studies. The OECD approach to estimating health trade flows under the SHA framework was also used partly to identify possible sources of data. Table 2 shows the sources of data in the form of data sets, reports, institutions and facilities that were identified for data collection.

It was intended that the data will be collected from all the possible institutions and facilities because they were few and located in the same city. This was achieved in terms of the relevant institutions of government, medical aid schemes, medical laboratories and bodies

regulating professions. However, not all private hospitals were reached because of the cost factor. Two private hospitals located in other towns other than Gaborone were not included. One private hospital is in Maun, located over 900 kilometres from Gaborone and another one is in Francistown, located over 400 kilometres from Gaborone. The capacities of these two hospitals (and occupancy rate is very low in the case of Delta Hospital) are relatively very small (see Table 6) and their exclusion will not significantly affect the results of the study.

Table 2: Data and Data Sources

A. Macroeconomic and Trade Environment		
Type of Data/Information	Source(s)	Purpose of the Data/Information
GDP; GDP per capita etc.	Statistics Botswana; Bank of Botswana	Macroeconomic overview
Balance of Payments; General performance of services in trade	Statistics Botswana; Bank of Botswana	Performance and trends of trade in services
Trade profile (direction, magnitude and values)	Statistics Botswana; Bank of Botswana	Performance and trends of merchandise trade
Trade policy relating to services, i.e. agreements, commitments; requests, offers etc.	Ministry of Trade and Industry; Trade policy documents and strategies; Commitment schedules	Botswana's trade policy, trade agreements and commitments on services in general and health services specifically
B. State of Domestic Healthcare System		
Type of Data	Sources	
Ownership structures and capacities of local healthcare facilities	The management of the facilities; Ministry of Health	Extent of foreign ownership of health facilities, FDI and domestic investment
Human resources in healthcare sector: doctors, specialists; nurses; other healthcare staff	Ministry of Health; Botswana Health Professions Council; Nursing and Midwifery Council	Distribution of health professionals between public and private facilities; presence of foreign professionals
Healthcare financing	Ministry of Health; Medical aid companies	Compatibility of health insurance and public health systems and their effect on access to health
C. Trade and trade policy for health services		
Type of Data	Sources	
Mode 1 (imports and exports); GATS Commitments, requests and offers	Ministry of Health; Ministry of Trade and Industry, hospitals; medical aid companies; annual reports	Direction, magnitude and value of trade in health services through Mode 1; policy, strategy and regulatory measures affecting trade in health services through Mode 1
Mode 2 (imports and exports); GATS Commitments, requests and offers	Ministry of Health; Ministry of Trade and Industry, hospitals; medical aid companies; annual	Direction, magnitude and value of trade in health services through Mode 2;

	reports; Ministry of Education (for training of health professionals)	policy, strategy and regulatory measures affecting trade in health services through Mode2
Mode 3 (imports and exports); GATS Commitments, requests and offers	Botswana Investment and Trade Centre; Ministry of Health; Ministry of Trade and Industry, hospitals; Bank of Botswana	Direction, magnitude and value of trade in health services through Mode 3; policy, strategy and regulatory measures affecting investment in health services
Mode 4 (imports and exports); GATS Commitments, requests and offers	Healthcare professional bodies; Ministry of Health; Ministry of Trade and Industry, hospitals	Direction, magnitude and value of trade in health services through Mode 4; policy, strategy and regulatory measures affecting temporary movement of health professionals

3.1.2 Procedures Followed to Obtain Information

Questionnaires of issues were used to interview the respondents. The questions were tailored to the types of institutions or facilities according to the type of data and information they would ordinarily possess. The institutions and facilities included private hospitals, medical aid schemes (or their administrators), medical laboratories⁵, Botswana Health Professions Council, Nursing and Midwifery Council, Botswana Health Hub, Ministry of Health, Botswana Investment and Trade Centre, Department of Tertiary Education Financing and the Ministry of Trade and Industry. The checklists sought to obtain data, policy decisions and expert knowledge from the respondents. In particular, the development of the checklists were guided by part 2 of the WHO guide for conducting country studies, which deals with methodological approaches to assessing trade in health services under the four modes of supply (World Health Organisation, 2005b). The checklists are contained in Annex 1.

⁵ It has been established that there are three private medical laboratories operating in Botswana; Diagnofirm, Lancet, which operates as part of Gaborone Private Hospital (GPH) and Medlass. Medlass does not directly import laboratory services but outsources some of its services to Lancet. Medlass would not ascertain which services are imported on their behalf. The other medical laboratories are the National Health Laboratory which processes all imports by government facilities and the Bokamoso Private Hospital medical laboratory.

Conducting research on health in Botswana is regulated by the Health Research Unit in the Ministry of Health. As a requirement, I applied for a Research Permit to conduct this study. The one-year Research Permit was granted on 8th September 2014. The research permit also requires that respondents consent to participating in the study filling in a specifically prepared consent form. Since my respondents included the Department of Tertiary Education Financing (DTEF) in the Ministry of Education and Skills Development, I was also granted a one-year Research Permit from the Ministry on 9th September 2014.

Formal letters requesting audience for face-to face interviews and data were hand delivered or emailed to institutions/facilities and follow-up made by telephone and/or email. The letters were accompanied by all documentation in support of the research, including, the research permit(s), checklists, consent forms, ethics approval from the university and a letter confirming my studentship also from the university.

3.1.2.1 Interviews

Face-to-face interviews which lasted on average, one and half hours were conducted between September 2014 and January 2015. The respondents included leaders of the institutions, facilities and government departments or their authorised representatives (see a list of interviewed institutions in Annex 2). The responses were hand-recorded and later transcribed into interview notes. The checklist of questions that were sent to the respondents were used to guide the discussions. The role of the researcher was to ensure that the respondents understood the issues in the checklist and respond accordingly. In some instances, follow-up questions through the telephone were made to get clarity on some issues or fill some gaps in the information. Some respondents preferred to provide responses to the issues and email to the researcher as opposed to face-to-face interviews because they did not have to spend time with the researcher responding to questions. Such situations were allowed and where necessary follow-ups were done through the telephone or email messages. In other cases, the respondents had to compile data and submit through email or hard copies after the interviews. The data and the transcribed notes are available and will be kept for the duration of the research project. They will not be used for any other purpose other than this research.

3.1.2.2 *Review of Documents*

Review of relevant documents was undertaken in particular on issues relating to the legal and regulatory provisions affecting trade in health services. The documents included pieces of legislation governing professional practice of healthcare professionals, the country's commitments in trade in services generally and in health services in particular and the requests and offers under different international trade arrangements in which Botswana is a party. The few existing research reports and policy documents were reviewed to obtain some trends in trade in health services and synthesise policy stances with policy and strategic actions.

3.2 Data Analysis

The analysis of data was systematically informed by the issues/themes for which the data were collected. These issues were divided into three aspects obtained from the WHO guide for conducting country studies, the macroeconomic and trade environment; the state of healthcare system; and the magnitude, direction and estimated value of trade flows of health services. Following these themes, the quantitative data was presented in tables and figures in response, especially to the first of the two research questions, which seeks to show the direction, magnitude and estimated value of trade in health services. The quantitative data was also used to augment the narrative of the macroeconomic and trade environment and the state of the healthcare system in the context of their effects on trade in services.

The quantitative data could be divided into two parts. The data that existed in published documents from institutions such as the central bank, the national statistics authority, annual reports of medical aid schemes, the Ministry of Health and the councils regulating health professionals. The other quantitative data were sourced from the institutions and health facilities for specific issues on the WHO guide for conducting country studies. These data were not published but were constructed specifically for this study in order to augment the published data.

The review of documents was done. The documents reviewed included policies, strategies, legal and regulatory instruments and Botswana's commitments and requests on trade in health

services. The review of documents was part of obtaining and analysing qualitative data. In particular, this qualitative analysis brought forth understanding of the likely effects on trade in health services. Lastly, insights obtained from interviews with respondents from institutions and facilities were used concurrently to fill the data and information gaps. The insights were also used to clarify certain policy and strategy positions.

The synthesis from the interpretation of the quantitative data, the review of documents and insights from interviews was used to answer the second of the two research questions. That is, explaining the opportunities and challenges imposed by liberalisation of trade in health services from a public health perspective.

3.3 Conclusion

The methodology used to collect data borrows aspects of the WHO guide for conducting country studies to identify sources of data and institutions to interview. The methodology is basically two-pronged. The first part of the methodology involves the search for existing data from published reports and databases. The second part entailed interviewing representatives of institutions/facilities to augment existing data and gather insights on policies, strategies and legal and regulatory measures affecting trade in health services. While the intention was to collect data from all possible sources, a few of them were left out due to cost implications (in the case of hospitals outside Gaborone) and non-response (in the case of smaller medical aid schemes). The quantitative approaches are used to analyse data and present the results on the direction, magnitude and estimated value of trade in health services according to the four modes of supply. The qualitative approaches are used to analyse the policies, strategies and legal and regulatory measures affecting trade in health services.

4 FINDINGS OF THE STUDY

This study has attempted to provide answers to the following questions:

1. What is the direction, magnitude and estimated value of trade in health services in Botswana?
2. What are the opportunities and challenges imposed by trade liberalisation from a public health perspective?

Aspects of the WHO guide for conducting country studies in trade in services have been used to obtain data on the above questions. This chapter presents the results. Following the WHO guide, there are three aspects of the results; the macroeconomic and trade environment, the state of the healthcare system and the trade flows according to the four modes of supply. The results are arranged as follows:

- a) The macroeconomic and trade environment as well as the state of the healthcare systems in Botswana as they relate to trade in health services. These are presented in Sections 4.1 through 4.3. Section 4.1 covers the overview of the economy and trade. Section 4.2 presents an overview of the state of healthcare system, providing contextual background of the key variables influencing trade in health services. Section 4.3 looks at national policies and strategies on trade and health services.
- b) Presented in sections 4.4 through 4.7 is Botswana's direction, magnitude and estimated value of trade in health services through the four modes of supply. The presentation of these results also looks at how the trade flows affect the provision of health services to the public. Also discussed are Botswana's sectoral and modal specific commitments in health services as well as legal and regulatory measures affecting trade.

4.1 Macroeconomic and Trade Environment

4.1.1 Overview of the Botswana Economy

Botswana's economy performed well during the period following the gaining of independence in 1966. Botswana graduated from being one of the poorest countries in the

world at independence to currently being an upper middle income country (Government of Botswana and European Commission, 2007; Government of Botswana, 2009a). The discovery and subsequent exploitation of minerals, especially diamonds whose mines were highly profitable, contributed immensely to the transformation of the economy (Government of Botswana, 2009a). Thus, Botswana experienced about four decades of robust economic growth and huge budget surpluses (African Development Bank, 2009).

Table 3: Selected Economic Indicators (2010 – 2014)

	2010	2011	2012	2013	2014
Nominal GDP (in US\$ Millions)	13,754	15,411	14,553	14,793	N/A
GDP per capita (US\$)	6,920	7,611	7,055	7,039	N/A
Real GDP Growth Rate	8.59	6.18	4.31	5.76	N/A
Inflation Rate	6.90	8.50	7.50	5.90	4.40
Gross Official Reserves (US\$ Millions) - End of Period	7,886	8,082	7,628	7,726	8,698
Months of Import Cover	11.80	11.10	11.20	9.9	10.30
BWP/US\$ Exchange Rate	6.79	6.82	7.61	8.39	8.97
Total Government Expenditure (US\$ Millions)	5,816	5,635	5,081	4,855	4,651
Expenditure on health as % of Annual Expenditure	8.54	8.81	11.33	10.69	N/A
FDI Inflows (in US\$ Millions)	5,793	7,377	7,130	6,666	N/A

Sources: Bank of Botswana; IMF

However, the economy remains less diversified. According to the Government of Botswana and European Commission (2007), four sectors, mining, government services, trade/hospitality and financial/business services accounted for over 70 percent of GDP during the 10-year period to 2007. As an indication of overreliance on the mineral sector, the subdued performance of the sector since the onset of the global economic and financial crisis in the 2008/09 financial year led to an equally poor performance of the overall economy (Bank of Botswana, 2010). The performance of the manufacturing sector has been sluggish, contributing less than 10 percent to GDP and employment.

Table 4: Sectoral Percentage Contribution to GDP (at Constant 2006 Prices)

Sector	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Agriculture	2.1	2.0	2.0	2.1	2.1	2.4	2.6	1.9	2.0	1.9
Mining	32.0	33.2	32.2	28.3	25.1	14.6	16.5	15.2	13.6	14.2
Manufacturing	4.9	4.8	5.3	6.1	5.8	6.6	6.3	6.6	6.5	6.3
Water and electricity	1.7	1.4	1.3	1.2	1.2	1.2	1.2	1.0	0.6	0.4
Construction	4.8	4.5	4.8	5.5	5.3	6.5	6.2	7.1	7.8	7.7

Sector	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Trade, hotels and restaurants	10.2	10.1	11.9	12.7	14.4	16.2	16.3	17.5	17.7	17.8
Transport, post and telecommunications	3.3	3.6	3.8	4.1	4.3	5.4	5.2	5.3	5.6	5.5
Banks, insurance and business services	12.0	11.7	11.3	11.6	12.5	13.7	14.1	14.3	15.2	15.2
General government	15.5	14.7	13.2	12.9	12.4	13.9	13.9	14.0	13.7	13.6
Social and personal services	4.2	4.7	5.0	5.0	5.5	6.7	6.5	6.6	7.1	7.2
Adjustment items ¹	9.3	9.4	9.2	10.6	11.5	12.9	11.2	10.5	10.2	10.3

1. Adjustment items include: taxes on imports; taxes on products/production and subsidies on products/production

Source: Bank of Botswana

The services sectors, especially finance and tourism have shown some growth and government has identified them as having potential for economic diversification among other sectors (Government of Botswana and European Commission, 2007). Table 4 above shows that other services sectors; construction, transport, post and telecommunications and social and personal services are also showing gradual increase in their percentage contribution to GDP. The sectoral contribution of the construction sector, which stood at 4.8 percent in 2004, had increased to 7.7 percent in 2013 and that of transport, post and telecommunications had increased from 3.3 percent in 2004 to 5.5 percent in 2013. The increasing trend of contribution to GDP is also shown by the social and personal services sector⁶, which increased from 4.2 percent in 2004 to 7.2 percent in 2013.

4.1.2 Botswana's Trade

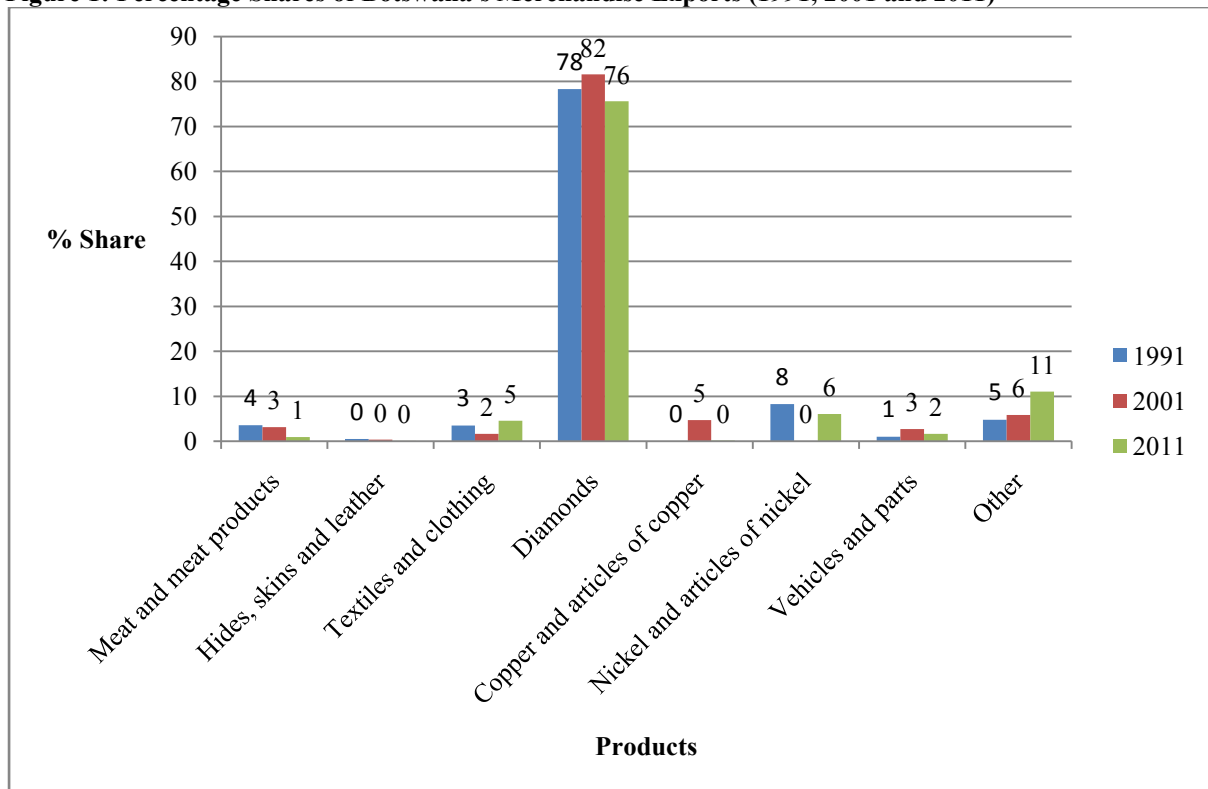
Botswana's merchandise exports have exhibited significant growth over the years. In current values, the merchandise exports were just over BWP5billion in 1991. It had increased to just over BWP12billion in 2001 and to BWP40billion in 2011. Prior to the period of the global economic crisis in 2008, merchandise trade surpluses were realised. Merchandise trade deficits have continued since 2008, with the deficit standing at over BWP13billion in 2012, having worsened from about BWP5billion the previous year (Bank of Botswana, 2013).

Merchandise exports remain highly undiversified. They are dominated by diamonds which account for over 75 percent of total exports. Figure 4.1 shows that for the years 1991, 2001 and 2011, diamonds accounted for 78 percent, 82 percent and 76 percent, respectively of total

⁶ The health services fall within this sector, among other key social services such as education. The data are aggregated and do not show the contributions of these sub-sectors to GDP.

merchandise exports. Copper and nickel products accounted for between 5 and 8 percent of total merchandise exports during the years 1991, 2001 and 2011. All the other individual products, except for textiles and clothing in 2011, accounted for less than 5 percent of total merchandise exports.

Figure 1: Percentage Shares of Botswana's Merchandise Exports (1991, 2001 and 2011)



Source: Statistics Botswana

Understanding the performance of trade in services is limited by the lack of disaggregated data on exports and imports as reported by the central bank's BOP statistics. The data presents only two categories of services, being "Transport" and "Other". A note on the data is that the "Other" category, "..... covers a wide range of services, including communication, insurance, legal services, business services etc, together with receipts from tourism" (Bank of Botswana, 2011). In order to understand any of the services sectors, in terms of their contributions to exports and imports, the undertaking of sectoral studies such as this one cannot be avoided. The data on services trade shows that overall there has been services trade deficit since 2008, which stood at just above BWP4billion in 2012.

4.2 Overview of State of the Healthcare System

Table 5 presents the health and social indicators for Botswana in comparison to the African region, upper middle-income countries and the rest of the world. The indicators show that generally the status of healthcare in Botswana is better, relative to other African countries. However, relative to other upper middle-income countries, Botswana is generally not doing well. For instance, Botswana's mortality rates and life expectancy are better than the African region but worse than the upper middle-income countries'. At 16,850 per 100,000 population, Botswana's HIV/AIDS prevalence is higher than all the countries in the world except Lesotho and Swaziland. Even though falling, the prevalence of tuberculosis is also fairly high, perhaps associated with that of HIV/AIDS. HIV/AIDS remains one of Botswana's major health challenges. It is one of the major causes of morbidity and mortality (Government of Botswana, 2011b). HIV/AIDS also accounts for a significant proportion of government expenditure on healthcare (Matambo, 2011, 2012).

Other indicators show that Botswana's population has access to some health services and social amenities. For instance, over 95 percent of people clinically eligible for ARV therapy are provided with it. Also, 97 percent of people use improved drinking-water sources, 94 percent of infants are immunised against measles and almost all births are attended to by skilled health personnel. At 28.4 per 10,000 population, the ratio of nurses and midwives to population is better than in other upper middle-income countries and much better than the rest of Africa. However, the ratio of physicians to the population of 3.4 per 10,000 population is significantly lower than the upper middle income countries' 15.5 per 10,000 population.

Table 5: Selected Key Health and Other Social Indicators

	Botswana	Upper middle-income	Africa	World	Year
Population (millions)	2.004	2424.452	892.529	7044.7	2012
Annual population growth rate	1.0	0.8	2.6	1.2	2002-12
Infant Mortality Rate	41	16	63	35	2012
Under 5 Mortality Rate	53	20	95	48	2012
Life expectancy	62	74	58	70	2012
Maternal Mortality Ratio	170	120	500	210	2013
HIV/AIDS Prevalence per 100,000 population	16850	416	2774	511	2012
Tuberculosis prevalence per 100,000 population	343	107	303	352	2012
Access to ARV Therapy (% clinically eligible)	>95	73	63	61	2012

	Botswana	Upper middle-income	Africa	World	Year
Number of deaths caused by communicable diseases per 100,000 population	555	75	683	178	2012
Number of deaths caused by non-communicable diseases per 100,000 population	612	558	652	539	2012
Number of deaths caused by injuries per 100,000 population	88	59	116	73	2012
% of population using improved drinking-water sources	97	93	66	90	2012
% of population using improved sanitation	64	74	33	64	2012
Number of physicians per 10,000 population	3.4	15.5	2.6	14.1	2006-13
Number of nurses and midwives per 10,000 population	28.4	25.3	12	29.2	2006-13
% of births attended by skilled personnel	99	95	48	72	2006-13
% of 1-year olds immunised against measles	94	96	73	84	2012
% of Under 5 Children Underweight	11.2	2.8	24.6	15.1	2006-12
% of Under 5 Children Overweight	11.2	6.6	6.4	6.7	2006-12
Hospitals per 10,000 population	1.3	N/A	0.8		2013
Hospital beds per 10,000 population	18	32	N/A	27	2006-12
Psychiatric bed per 10,000 population	2.2	2.2	0.6	2.5	2006-10
Expenditure on health as % of GDP	5.2	5.8	6.2	9.1	2011
Private expenditure on health as % of total expenditure on health	38.4	43.8	51.7	41.1	2011
Out-of-pocket expenditure as a % of private expenditure on health	12.7	74.2	56.6	49.7	2011

Source: WHO World Health Statistics 2014 (World Health Organisation, 2014)

The provision of health services in Botswana is undertaken by both the public and the private sector, with the public sector being the main service provider. Public health facilities provide health services to more than 80 percent of the population (Government of Botswana, 2011b). The public healthcare sector delivers services to the communities for virtually free, through hospitals, primary hospitals, clinics, health posts and mobile clinics. The private health services are provided through private hospitals and clinics. The private clinics, which are in most cases operated by a few doctors and do not have hospital beds, laboratories, pharmacies, theatres and other facilities. Table 6 shows the hospitals available in Botswana. It was gathered from interviews with the private hospitals that individual doctors from private clinics would have arrangements with the private hospitals for admission rights and access to other services that they do not provide.

Table 6: Hospitals and Hospital Beds in Botswana

Public Hospitals			
Hospital Name	Type of Location	Number of beds	Occupancy Rate

Public Hospitals			
Hospital Name	Type of Location	Number of beds	Occupancy Rate
Letsholathebe Memorial	Rural	281	41.5
Sekgoma Memorial	Rural	475	52.5
Scotish Livingstone	Rural	295	57.7
Mahalapye	Rural	320	100.9
Princes Marina	Urban	567	165.3
Nyangabgwe	Urban	567	80.3
Athlone	Urban	163	25.4
Sbrana	Urban	300	64.4
Selibe-Phikwe	Urban	66	64.3
Total/Average Occupancy		3034	72.5
Mission(Church) Hospitals			
Hospital Name		Number of beds	Occupancy Rate
Seventh Day Adventist	Rural	167	38.1
Deborah Retief	Rural	130	63.6
Bamalete Lutheran	Rural	140	37.5
Total/Average Occupancy		437	46.4
Mine Hospitals			
Jwaneng Mine	Urban	57	51.7
Orapa	Urban	106	24.9
BCL	Urban	23	11
Total/Average Occupancy		186	29.2
Private Hospitals			
Hospital Name		Number of beds	Occupancy Rate
Gaborone Private Hospital	Urban	89	48
Bokamoso Private Hospital	Urban	128	40.7
Delta Medical Centre	Rural	20	32.2
Riverside Hospital	Urban	10	Unknown
Total/Average Occupancy	Urban	237	40.3
Grand Total		3894	47.1 ^a

Source: Statistics Botswana; <http://www.botswanariversidehospital.com/index.html>

^a - excludes Riverside Hospital

Note: The Mission (Church) hospitals are heavily funded by government and their services are accessed by the public on the same terms as in other public hospitals.

Among public hospitals are the ones that were initially established by churches. Most of these hospitals are semi-autonomous entities which are currently jointly operated by the respective churches and government. Government also owns and operates primary hospitals across the country, with a total bed count of 783 and an average occupancy rate of 38.1. There are also hospitals which have been established in mining towns by the mining companies to serve the mining personnel and their families and dependents. Two mine hospitals in the diamond

mining towns of Jwaneng and Orapa, however, also serve the general public as a result of an agreement between the mining company, Debswana and government. A fairly smaller hospital in the copper-nickel mining town of Selebi-Phikwe in the Central District exclusively serves the miners and their relatives (Sinha & Onyatseng, 2012).

4.2.1 The Role of Health Insurance

Health insurance is a very important factor in healthcare provision in Botswana. In particular, it relates to enabling access to private health services by making them affordable. In turn, private healthcare sector eases pressure on the public healthcare sector. Medical aid schemes also provide a vehicle through which employers are able to provide access to healthcare as some of the essential employee benefits. Employers and employees usually share the cost of monthly subscriptions towards medical insurance. Employers benefit from having employees having access to higher quality health services through reduced absenteeism and expected higher productivity from healthier employees.

Most employers offer their employees medical insurance benefits by paying a proportion of the employees' subscriptions, usually half of the cost of the subscription. There are three major medical aid schemes, Botswana Public Officers Medical Aid Scheme (BPOMAS), Botswana Medical Aid Society (BoMAID) and PULA Medical Aid, which together account for about 80 percent of insured lives. The other medical aid schemes are fairly small and relatively new in the health insurance market. According to the Non-bank Financial Institutions' Regulatory Authority (NBFIRA), in 2010, a total of 142,013 principal lives and 199,252 dependents' lives were insured. This represented about 17 percent of the population.

The medical aid schemes also play an important role in providing their members' access to foreign based health services. While it would generally be prohibitively expensive for the general public to access foreign health services, medical aid schemes guarantee their members' access by reducing the financial burden at the time it becomes necessary for members to access such services. Although the rules governing use of foreign based health service providers would differ from one medical aid scheme to the other, medical aid schemes do permit their subscribers access to use foreign health services.

In order to facilitate their members' access to foreign health services providers, especially South Africa, the three major medical aid schemes have entered into formal arrangements with some South African hospital groups. The hospital groups with which formal arrangements exist include, Life Healthcare, Netcare, Medi Clinics, Clinix, Lenmed Health and National Network of Hospitals. In cases, where a medical aid scheme member from Botswana accesses health services from a contracted hospital in South Africa, the rules apply as they would if they were in Botswana. The patient is required to pay a co-payment (which would range between 10 and 20 percent) and any applicable taxes. This reduces the financial burden on the part of the patient in that they are not required to pay a full amount of the service, thus it promotes their access to services. Member patients who seek health services from facilities that are not contracted to their medical aid schemes have to pay full costs of services and can later submit claims to their medical aid schemes. As a result, member patients accessing health services in any country other than South Africa have to pay upfront and submit claims to their medical aid schemes.

Pre-planned hospitalisations and referrals of medical aid member patients in foreign hospital facilities are allowed by all the three major medical aid schemes. In such cases, the rules that apply in cases of hospitalisation and referrals within Botswana would also apply. Generally, patients would pay their co-payment portion and the medical aid scheme would pay its portion for the services associated with the hospitalisation or referral. However, it is important to note that the medical aid schemes do not cover any travel and lodging (outside the health facility) costs associated with the hospitalisation or referral.

4.3 National Policies and Strategies for Trade in Health Services

4.3.1 Overview of the Legal and Regulatory Environment in the Health Sector

Chapter II, sections 3 to 18, of the Constitution of Botswana provide for the protection of fundamental human rights and freedoms. The fundamental rights include, among others, the right to life, liberty, security of the person and the protection from inhuman treatment (Republic of Botswana, 1966). The Constitution of Botswana, therefore, does not contain second generation rights such as the right to healthcare. The major piece of legislation that governs the provision of healthcare is the amended Public Health Act of 2013 (Republic of

Botswana, 2013). The Act provides for the control and prevention of spread of diseases, including those subject to International Health Regulations. It also regulates the provision of sanitation and housing, and protection of foodstuffs and water supplies. The Act establishes the National Health Council. Section 6 of the Act empowers the National Health Council to advise the Minister of Health on policy, strategy and legislation on matters of public health as well as norms and standards for the establishment of health facilities.

In terms of regulation of health professionals, two legal instruments are applicable, the Botswana Health Professions Act, which regulates the practice of medicine, dentistry, pharmacy and allied health professions (Republic of Botswana, 2001) and the Nurses and Midwives Act, which regulates the practice of nurses and midwives (Republic of Botswana, 1995). The legal and regulatory effect of these laws on the respective professions is discussed under Section 4.7 which deals with movement of natural persons. The two acts establish the councils and committees that regulate practice in the respective professions. The councils' memberships consist of representatives that are drawn from the professions, academics in health education, the Ministry of Health, the Attorney General's Chambers and the general public.

The other pieces of legislation dealing with different aspects of the health sector, include the Hospitals and Nursing Homes Act, 1992 which provides for the regulation of private hospitals, nursing homes and similar institutions, including their licensing (Republic of Botswana, 1992a) and the Drug and Related Substances Act which provides for the control and regulation of drugs/medicines, including habit-forming drugs (Republic of Botswana, 1992b). Other laws deal with the selected specific health conditions, such as the Mental Disorders Act, which regulates the reception, detention, treatment and protection of mentally disordered persons (Republic of Botswana, 1971) and the Sleeping Sickness Act (Republic of Botswana, 1939). There is also a law that deals with the conveyance of dead bodies, including dead bodies of persons who died of certain diseases (Republic of Botswana, 1933).

4.3.2 Trade Policy and Health Services

Trade policy documents for Botswana present the country as being fairly open to trade. Botswana's trade policy is anchored on the need to pursue an "..... export-led growth strategy

for economic development" (Government of Botswana, 2009b). This entails, among others, achieving export diversification and export competitiveness for both goods and services. The national strategy for promoting exports, however, identifies manufactured products from sectors that include arts and crafts, garments and textiles, jewellery, minerals, glass, leather and beef (Government of Botswana, 2010). Services are not explicitly identified in the strategy as sectors with potential to grow, develop and diversify exports. Nevertheless, the subsequent policy discussions indicate that trade policy makers believe that Botswana could have comparative advantage in services. For instance, in the Tripartite Free Trade Area (TFTA) negotiations, Botswana argues that the services' negotiations should not be deferred to the second stage of the negotiations but should be brought forward to the first stage because it is the area where the country will derive more benefits (Imani Development & SAIIA, 2011; Ministry of Trade and Industry, 2012). It is worth noting, however, that neither in the SADC nor SADC-EPA nor TFTA negotiations is health services identified as an area in which Botswana has comparative advantage.

Other than the GATS, Botswana has not entered into any trade agreement that covers trade in health services. The SACU agreement does not cover trade in services at all while the SADC negotiations under the SADC Protocol on Trade in Services, at this stage, cover six "priority sectors" that include construction, communication, transport, energy-related, financial and tourism services (UNCTAD, 2009). Nonetheless, South Africa has submitted requests to the BLNS countries, and Mozambique and Zimbabwe on "hospital services (CPC 9311)" and "other human health services (CPC9319)". South Africa requests full liberalisation in Modes 1, 3 and 4. Perhaps South Africa's requests are an indication that other services, including health will be negotiated under the SADC Protocol on Trade in Services in later rounds of negotiations. The negotiations on trade in services under the EPA are still to commence and it is unlikely that health services will be one of the sectors up for negotiation. The requests that the EC submitted to Botswana following her commitments under the GATS did not include health services (European Commission, 2002).

Botswana has made commitments in health services in the GATS (World Trade Organisation, 1995, 1998)⁷. Botswana's commitments are in "medical and dental services (CPC 9312)", "services provided by mid-wives, nurses, physiotherapists and para-medical personnel (CPC

⁷ See Botswana's schedule of horizontal commitments and specific commitments on health services in Annex 3.

93191)" and "specialised medical services including forensic medicine, neuro-surgery, cardio-thoracic surgery, micro-vascular surgery, plastic surgery, geriatrics, traumatology, anaesthesiology, clinical immunology and oncology, child psychiatry, physical medicine and intensive care specialist (CPC 93122)". It is worth noting that except for the requirements under the horizontal commitments, Botswana's schedule of specific commitments fully liberalise trade in all the committed sectors under consumption abroad (Mode 2) for both market access and national treatment. Commitments under both market access and national treatment are unbound for cross-border supply (Mode 1) and movement of natural persons (Mode 4).

The horizontal commitments have no market access limitations for Modes 1 and 2. This is significant in that the absence of limitations apply to all sectors in which commitments have been made and Botswana has committed not to impose new measures in future (World Trade Organisation, 2005). What is listed as limitations under Mode 3 are domestic regulatory requirements that would also apply to domestic firms and should not have been included in the commitments. For instance, obligations that firms should be registered with the Registrar of Companies and a requirement that firms should have been issued a licence by a relevant authority are legally binding requirements that apply to firms operating in Botswana regardless of their origin (Republic of Botswana, 1984). Limitations under Mode 4 include that, foreigners can only be employed as "managers, executives, special technicians and highly qualified professionals". This is consistent with the observation by Nielson (2003), that the WTO members tend to limit commitments to the high skilled cadres. Also, professionals are required to be registered with appropriate professional bodies. This is also a requirement that applies even to the locals as provided for by the two pieces of legislation that govern the practice of health professionals discussed in 4.3.1 above. Further, foreign investors are required to conform to the localisation policy which requires that investors train citizens in order to enable them to take over senior management positions over time (World Trade Organisation, 1995).

4.3.3 Public Healthcare Sector Strategies

Botswana developed a national economic strategy in 2008 (Government of Botswana, 2008). The strategy was developed as a result of advice from a high level advisory body, the

Business and Economic Advisory Council (BEAC) which was set up in 2005 to assist Government achieve acceleration of economic diversification and sustainable growth. The objective of the strategy is to address "... the primary challenge of Botswana, which is to diversify the economy to ensure that Batswana (*citizens of Botswana*) continue to enjoy the fruits of sustained economic growth post depletion of minerals, especially diamonds". It is intended that over and above sustainably exploiting the existing natural resources that the country is endowed with, Botswana should develop selected services sectors with high potential to grow and diversify the economy. The strategy recommends embarking on key national projects in diamonds, health, education, agriculture, innovation and transport. The implementation of the projects is to be facilitated through the establishment of the 'hubs' in the identified areas. The hubs are established with the intention to create sector clusters through which diversification and growth will be achieved within the sectors themselves and in other sectors through sector linkages.

Alongside other five hubs, the Botswana Health Hub (BHH) was established in 2010. The BHH was envisaged to develop Botswana into a regional (southern Africa) centre of excellence in the area of public health management. At the time, the reputation of the country to effectively manage the health problems associated with HIV/AIDS was seen as the country's point of advantage (Government of Botswana, 2008). The national strategy document acknowledged the inadequacy of the local expertise to enable Botswana to achieve its objective of becoming a regional centre of excellence. Therefore, it proposed harnessing the support of foreign expertise while fast-tracking the development of local expertise.

The vision of the BHH is, "driving innovation to enhance service delivery that facilitates economic growth within the Botswana health sector". Its mission statement reads as, "to identify specific initiatives that will enable Botswana to transform delivery and become a regional centre of excellence by stimulating multi-stakeholder participation". Thus the vision and mission of the BHH, envisage the enhancement of services offered by the health sector to contribute to economic growth. Such services are to be offered not only to the local population but other countries; the BHH intends to make the country a regional centre of excellence in the provision of health services. Among what the BHH refers to as its functional principles, is, "to establish clinical and research centres of excellence in Botswana that can serve both the region and international clients", thus there is also a desire to export

health education. The BHH also intends to promote medical tourism to target both the regional and international markets. Areas that the BHH has identified for possible development are listed as, "centre of excellence for cancer treatment"; "high quality facility for orthopaedic services"; "modern treatment facilities including surgery for cardio-vascular diseases"; "organ transplant services"; "neurological treatment facilities"; "pharmaceutical industry"; and "high quality diagnostic facilities (imaging and laboratory)". However, it has not been ascertained whether the country has capacity to offer these services and the strategy does not show how capacity will be built.

4.3.4 Private Healthcare Sector Strategies

The strategies for private healthcare sector in Botswana are by and large inward looking. They are driven by the desire to service the domestic private healthcare market. There are only four private hospitals, with two major ones situated in the capital city, Gaborone. The other two are very small establishments based in Maun and Francistown with capacities of 20 and 10 beds respectively (see Table 6 above). For the purposes of this study, the two major hospitals in Gaborone were interviewed. They have a capacity of 217 hospital beds; Gaborone Private Hospital (GPH) with 89 and Bokamoso Private Hospital (BPH) with 128 hospital beds. The patients' base for the private hospitals is by and large in two categories; the private patients who are covered by health insurance and government funded patients who are referred from government healthcare facilities. Both hospitals are managed by South African based hospital groups with which they maintain close ties. They collaborate with hospitals in South Africa to access especially tertiary health services for patients from Botswana. While they express the desire to expand and develop capacity to provide health services for the southern African region and beyond, their facilities are relatively small, less sophisticated and have relatively inadequate and less diverse numbers of healthcare professionals. There are no explicit and elaborate plans in the short or long term to embark on significant investments to enable them to serve the international markets.

4.4 Mode 1: Cross-border Supply

Health services that are imported through cross-border supply are mainly laboratory tests that are obtained through sending specimens to foreign based facilities, mainly to South Africa.

Interviews with the hospitals and laboratories (both public and private) attest that in some cases, sourcing laboratory tests from South Africa is necessitated by local laboratories' lack of capacities to undertake certain tests. However, in some cases, it is the lack of adequate volumes (or numbers) to justify the undertaking of some tests by the local laboratories. Therefore, because of the low volumes in the health facilities, it makes sense to outsource certain tests rather than procure the materials (with large capacities and high cost) only to undertake very few tests with them and discard the unused remaining ones (Interview with the National Health Laboratory).

There are three major private laboratories; laboratories for the two major private hospitals, BPH and GPH⁸ and Diagnofirm which is wholly citizen owned. Table 7 shows imports of laboratory services by government from a laboratory in South Africa during the period 2009/10 – 2013/14. The Table also shows government's expenditure on laboratory services from a local laboratory, Diagnofirm. Government has contracts with these two laboratories and outsources some of the tests to them. During the period, the value of imported laboratory services has diminished and on the other hand the value of services procured from the local laboratory increased steadily.

Table 7: Laboratory Services Procured by Government from Laboratories in Botswana and South Africa - 2009/10 to 2013/14 (in BWP)

Financial Year	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014
Diagnofirm (Botswana)	2,504,782	4,595,459	4,727,372	5,582,620	8,248,193
Amphath (South Africa)	-	2,598,495	244,262	152,655	506,287

Source: National Health Laboratory

The private hospitals also send specimens through courier to South African laboratories. Table 8 shows medical laboratory services import values by three medical laboratories from South Africa in 2013. The values of imports exclude courier costs. When adding imports by government, from Amphath in Table 7, the total estimated value of imported laboratory tests in 2013 was about BWP13,55million or about US\$1,53million. This value is fairly representative in that it covers almost all imports from the local laboratories that do import.

⁸ Information gathered from an interview with the GPH shows that the hospital is a joint venture between Life Healthcare, a South African hospital group, which owns 51% stake and local entities, which own the remaining 49%. The Lancet Laboratory operates as part of GPH.

Other smaller local laboratories import indirectly through procuring some of their laboratory tests from these private laboratories, in particular, Lancet and Diagnofirm laboratories.

Table 8: Imports of Laboratory Services by Private Medical Laboratories in 2013 (in BWP)

Laboratory	Imports in (BWP)
Lancet Laboratory (GPH)	5,400,000 – 6,000,000
Diagnofirm Medical Laboratories	4,816,372
BPH Laboratory	2,522,797
Total	12,739,169 – 13,341,182

Sources: Bokamoso Private Hospital; Diagnofirm Medical Laboratories; Gaborone Private Hospital

Note: Lancet and Diagnofirm imports are inclusive of imports for other laboratories that procure from them. Diagnofirm imports also include those procured by the public laboratory with which there is a standing contract.

It has been established through interviews of the private hospitals that there are very few instances (and thus negligible import values) of procurement of diagnostic services from foreign facilities and foreign based specialists through sending of images and results for interpretation and 'second opinion'. Such services, would mostly be procured from health facilities that have relationships, especially the same hospital groups which the local hospitals are part of. The major local private hospitals are operated by South African hospital groups, hence most of these services would be imported from South Africa.

Botswana's GATS commitments for cross-border supply of health services are unbound (World Trade Organisation, 1995). Requests that have been received by Botswana were from the EU in 2002 under the GATS (European Commission, 2002) and lately from South Africa in 2014 under the SADC Negotiations on Trade in Services (SADC Secretariat, 2014). The EU requests do not cover health services. South Africa requests full commitment on market access and national treatment in Modes 1, 3 and 4 on sub-sectors, "hospital services" (CPC 9311) and "other human health services" (CPC 9319). Other than Botswana, South Africa's requests are to Lesotho, Mozambique, Namibia, Swaziland and Zimbabwe.

Despite that Botswana endeavours to export health services to the region, there is no information on policy on e-health. The ICT infrastructure is not very impressive. According to the World Economic Forum (2015) in Botswana, internet usage which stands at 15 percent is lower than in most other SADC countries. It is significantly lower than in Mauritius, Seychelles and South Africa. Further, despite that the National ICT Policy (Government of

Botswana, 2004) identifies the importance of ICT in healthcare, both the National Health Policy and the National e-Government Strategy do not explicitly provide for measures to use e-health in the provision of health services (Government of Botswana, 2011b, 2011c). Keetshabe (2012) observes that no legal and regulatory framework exists for e-health, including, for instance, the absence of supporting legal instruments such as a law that provides for personal data protection.

4.5 Mode 2: Consumption Abroad

4.5.1 Exports of Health Services

Botswana barely exports health services through Mode 2. Data on international tourist arrivals does not show the number of tourists who entered Botswana for health purposes. Sources of data on foreigners entering Botswana to seek health services, therefore were obtained from private hospitals. Insights gathered from interviews with the two major private hospitals, BPH and GPH, are indicative of the private health services sector that by and large depends on residents for business. While the desire to attract foreign patients exists within the management of the hospitals, its implementation and realisation are more of future endeavours. The other source of information on exports by the local private hospitals would be when they attend to foreigners living in Botswana who seek health services. During interviews with the private hospitals, they could not provide data on services rendered to foreigners living in Botswana, thus this component could not be used to estimate exports. If statistics were available, this would perhaps account for the largest exports of health services under Mode 2. Most of the local education and training facilities do not admit foreigners and those that do, admit very few of them, hence there are negligible exports of health education.

BPH indicates that they get contracted by organisers of big international sporting events to make available their facilities in order to offer health services in the event of medical cases associated with such events. Examples include the Africa Youth Games which were held in Botswana in May 2014. The annual Toyota 1000 Desert Race, an international motor-racing sport is also mentioned as a sporting event that made such an arrangement with the BPH. However, the hospital has not captured data on the level of use of its facilities and services during the past events. On the other hand, the GPH reports very few and sporadic cases of

patients from Zimbabwe that seek services from the hospital. During the 2012/13 financial year, the hospital received only three patients from Zimbabwe specifically for oncology treatment. The estimated revenue generated from the three patients was BWP250,000.

4.5.2 Imports of Health Services through Mode 2

Consumption of health services abroad is estimated from two major sources; government referral of patients to foreign health facilities⁹ and medical aid payouts¹⁰ to foreign health facilities. All the three major medical aid schemes (which command about 80 percent of membership) indicate that the health insurance coverage is portable, except that for countries other than South Africa, patients have to pay service providers upfront and claim from the scheme. However, benefits are capped at specific amounts, hence if the insured members access services in countries where the costs are significantly higher, they would tend to incur higher out-of-pocket expenditure.

Data on public patients and private patients referred to South Africa over the period 2010 to 2014 are presented in Tables 9 and 10 respectively. Prior to 2010, data on imported public health services were not collated and the expenditures were not monitored. However, according to the Ministry of Health officials, there were instances that were observed which were indicative of exorbitantly high expenses associated with the referral of public patients to South Africa up to 2010. This prompted Government to put in place mechanisms to manage the referrals and monitor the costs in order to reduce costs and make the referral system more efficient and sustainable. In order to achieve these objectives, since 2010, Government contracted a company to manage the referrals to South Africa. The contracted company produces regular reports to show the services rendered and the expenditures involved. The

⁹ Government refers almost all patients to South Africa.

¹⁰ Medical aid payouts are reliable estimates of insured private patients' expenditures when they seek services from foreign based health facilities. The payouts would include those that patients would have paid the facilities and claimed from their medical aid schemes and those that the medical aid schemes paid directly to the health facilities. The major medical aid schemes report that they have formal agreements with most major healthcare facilities in South Africa, hence such facilities can render services to their members and submit claims like the local healthcare facilities.

health services include those in specialty areas of cardiology, oncology, ophthalmology and orthopaedics.

Table 9: Number and Cost of Medical Referrals to South Africa - 2010 - 2014

	Number of Cases	Cost of referrals (in BWP)	Average cost per case
2010/2011	643	145,000,000	225,505
2011/2012	843	86,738,644	102,893
2012/2013	1,092	95,401,026	87,364
2013/2014	1,708	101,475,721	59,412

Source: Healthshare Integration Solutions, on behalf of the Ministry of Health

The Ministry of Health officials believe that the cost of referrals have gone down due to better management of the referral system and monitoring of costs (Interviews with the Ministry of Health officials). Table 9 shows the number of medical cases from public health facilities referred to South Africa since 2010. The number of cases which stood at 643 in 2010 had more than doubled to 1708 in 2014. However, the cost did not increase as much as the number of cases. In fact, the cost went down to BWP101.5million in 2013/14 from BWP145million in 2010/11. The average cost per case was reduced from BWP 225,505 in 2010 to only BWP59,412 in 2014. At the 2010 average cost of BWP225,505 per case, government would have needed over BWP385million to import services for the 1708 cases in 2014; or with BWP101.5million spent on imports in 2014, only about 450 cases would have been referred to South Africa.

Table 10: Medical Aid Schemes Payouts to South African Service Providers 2010 – 2013 (in BWP)

Medical Aid	2010	2011	2012	2013	2014
BoMAID	30,510,360	32,113,834	41,581,112	48,887,782	34,725,624
BPOMAS ^a	11,050,665	11,804,410	12,057,361	15,303,574	17,582,106
PULA ^a	18,246,680	23,108,873	12,552,909	15,392,943	13,323,995
Total	59,807,704	67,027,116	66,191,382	79,584,299	65,631,725

Source: Medical Aid Schemes/Medical Aid Annual Reports

Notes: ^a – The values for BPOMAS (all values) and PULA (for 2010) are author's own calculations based on the information provided and the information obtained from the annual reports.

Table 10 shows an estimate of benefits paid out by the three major medical aid schemes to South African service providers between 2010 and 2014. Data on the number of patients could not be sourced. As indicated, the three major medical aid schemes command about 80 percent of membership of medical aid schemes in Botswana. Taking these factors into

account and adding the value of imports by the public sector, it is estimated that Botswana would have imported health services worth about BWP217million in 2010 from South Africa through Mode 2. The estimated imports stood at BWP197million in 2013, having increased from BWP175million the previous year. The high figure of BWP217million in 2010 would be accounted for by the public sector imports which it has been established were exorbitant and started declining after a monitoring mechanism was put in place.

4.5.3 Training of Healthcare Professionals Abroad

As stated in 2.2.1 above, this study has adopted the UN Statistical Commission definition of trade in health services (Statistical Office of the United Nations, 1991) together with the explanations by Herman (2009) which includes health education.

Botswana substantially depends on foreign countries for training its personnel on health-related disciplines. Most citizen healthcare professionals' education and training are sponsored by government. This makes it easier to compute the expenditure on health-related training in foreign countries, thus one is able to estimate the imports of health related education services. Until 2009, Botswana did not have a medical school¹¹, thus all the medical doctors and other related professionals were trained outside the country. Institutes of health sciences did exist, but they concentrated on offering especially nursing-related training as well as other areas but only up to diploma level. Such other areas included pharmacy, laboratory technology and environmental health. Also, the University of Botswana, offered training on nursing up to degree level. Hence, the need to import health education services has existed over a long time. It is evident that the new and only medical school is not adequate to meet the local demand for medical doctors.

Table 11 shows the number of students in healthcare-related training programmes in local Botswana training institutions during the 2012/13 financial year. The students include both new and continuing students. All the institutions, except the University of Botswana are institutes of health sciences and students in them are pursuing diploma programmes. Lobatse,

¹¹ The only medical school in Botswana was opened in 2009 at the University of Botswana and the first batch of doctors graduated from it in October 2014. The doctors will start practising medicine after undergoing a one-year internship.

Gaborone and Serowe institutes of health sciences have students in programmes other than General Nursing. The other programmes are, Environmental Health, Health Education, Pharmacy and Medical Laboratory Technology. All the other institutes only provide programmes in General Nursing. Programmes offered at the University of Botswana are degree programmes in Nursing Science, Environmental Health and Medical Laboratory Science.

Table 11: Students in Health-related Programmes in Local Institutions During 2012/13 Financial Year

Name of Institution	Number of Students	Annual Cost of Training per Student ^a	Total Cost of Training
Molepolole	122	53 376	6 511 872
Francistown	166	53 376	8 860 416
Kanye	156	53 376	8 326 656
Lobatse	187	53 376	9 981 312
Gaborone	371	53 376	19 802 496
Serowe	159	53 376	8 486 784
Deborah Retief Memorial	120	53 376	6 405 120
University of Botswana	392	67 990	26 652 080
University of Botswana (Medicine) ^b	301	67 990	16 066 176
Total	1 673		111 092 912

Source: Department of Tertiary Education Financing, Ministry of Education and Skills Development

Notes:

^a – Annual Cost per student includes tuition, books, stationery, attachment allowance, maintenance allowance and school project. The cost for the institutes of health sciences exclude tuition. The institutes of health sciences are government-run institutions, thus, the Department of Tertiary Education Financing does not pay out money to them as tuition. It is assumed here that the cost of tuition for training at these institutes is the same as at the University of Botswana. However, this is still not the full cost of training students at these institutes because, the maintenance costs such as accommodation and food are borne by government through provision of the services within the facilities.

^b – Out of the 301 medical students at the University of Botswana, 181 are pursuing a Pre-medicine programme in preparation to enrol for the full medicine programme.

According to Table 11, Botswana training institutions have capacity to absorb only a few healthcare professionals in limited areas of expertise. The level of training is also by and large only limited to lower levels of qualifications. Hence, the necessity to send students to foreign institutions to augment domestic capacity.

According to the Department of Tertiary Education Financing (DTEF) in the Ministry of Education and Skills Development, as at July 2014, there were 764 students at different levels of pursuing healthcare related studies in different countries abroad (see Table 12). Their areas

of discipline included among others, medicine, pharmacy, biomedical engineering, dentistry, physiotherapy, radiology and environmental health. Government of Botswana covers all the costs associated with the training of the students. Therefore, estimating the monetary value of imports of these health services is done by separating the cost of training (tuition and related fees) from expenditures on the maintenance of the students, which include stipends (and other allowances) given to students, health insurance and travel expenses.

Table 12: Botswana's Students in Health Programmes in Foreign Countries During Financial Year 2012/13

	Medicine	Pharmacy	Dentistry	Nursing	Biomedical Science	Radiology	Physiotherapy	Environmental Health	Other	Total
Australia	3	1	-	-	17	1	-	-	6	28
Canada	-	-	-	-	6	4	-	-	-	10
Czech Republic	38	-	29	-	-	-	-	-	-	67
Jamaica	85	8	9	-	3	-	-	-	-	105
New Zealand	-	-	3	-	8	-	-	-	-	11
South Africa	15	16	22	-	39	20	4	-	21	137
Lesotho	-	11	-	-	-	-	-	-	-	11
Malaysia	-	73	-	35	-	-	-	-	-	108
Namibia	-	-	-	31	-	-	-	4	-	35
Russia	4	-	-	44	-	-	-	17	-	65
UK	3	18	27	-	14	10	13	-	14	99
USA	91	-	-	-	-	-	-	-	-	91
Zimbabwe	1	-	-	-	-	-	-	-	-	1
Total	240	127	90	110	87	35	17	21	41	764

Source: Department of Tertiary Education Financing, Ministry of Education and Skills Development

Data on cost to government for training healthcare professionals outside Botswana were available for the year 2011. Table 13 shows that the cost of tuition was about BWP 113.8million and the costs related to the upkeep of the students while studying stood at BWP59million.

Table 13: Estimates of Expenditure on Training of Health Personnel Outside Botswana in 2011

Country ^a	Number of Students	Tuition	Stipend and Other Maintenance Costs	Total Cost (BWP)
Australia	77	21 867 955	7 886 032	29 753 987
Czech Republic	82	11 378 553	6 701 850	18 080 404
UK	75	16 776 446	12 155 363	28 931 809
Bahamas	8	1 357 702	1 446 084	2 803 786

Grenada	72	28 007 076	12 905 744	40 912 820
Jamaica	56	19 906 605	10 581 462	30 488 067
Trinidad & Tobago	42	14 044 386	7 086 815	21 131 201
USA	1	429 863	201 567	631 430
Total	413	113 768 587	58 964 916	172 733 502

Source: Department of Tertiary Education Financing

Note: ^a – Estimates are only for countries on which data on expenditure was available

4.5.4 Import and Modal Substitution in Health Services

There are indications that government has been concerned about the high expenditure on imports of health services. An interview with the former Health Hub Coordinator revealed that in 2008, it was established that imports of health services from South Africa alone stood at about P120million. Most of the services imported were for procedures that could not be performed locally because of unavailability of expertise, facilities or equipment. Examples of the procedures included heart bypass surgery, cataract surgery and renal dialysis.

At the time the Health Hub was established, one of the objectives was to reduce imports; the target was to reduce the imports by 50 percent, even though it was not made clear as to the time frame within which the target will be achieved. This policy stance is consistent with the Economic Diversification Drive (EDD), a government strategy that focuses on a short-term objective of reducing imports. In the long term, the EDD strategy intends to develop sustainable businesses that will not only substitute imports but will be able to produce products that can compete in the international markets (Government of Botswana, 2011a). In the short-term, the objective of reducing imports of health services was to be achieved through promoting initiatives that promoted the undertaking of the medical procedures within the country by bringing specialists to do mass operations. In a sense, in part substituting imports through Mode 2 with imports through Mode 4.

The growth and development of the private healthcare sector in Botswana, especially the establishment of private hospitals has had an impact on the government's procurement of health services from foreign based facilities. As a result, services which would in the past have been sought from facilities in foreign countries are obtained from the local private hospitals with capacity and expertise that are not available in the public facilities. The

referrals from government to the private hospitals therefore, substitute imports that were necessary in the past. The advantages associated with government acquiring the services for the public patients from the local private hospitals include, that the local services are relatively cheaper on their own right. In addition, the costs of travel are generally lower on the part of government and the patients in that government does not bear the transport costs in cases where the patients are not hospitalised and are capable of taking themselves to the private facility and the patients have to travel shorter distances, generally. Also, the patients and their families and friends are spared the stress, discomfort and anxiety of travelling and staying in a foreign country. Thus, both the financial and emotional costs have been greatly reduced by accessing services in the local healthcare market as opposed to the foreign healthcare market.

Government referrals to the BPH and GPH include procedures in orthopaedics, neurology, nephrology and oncology. The Botswana Health Professions Council Annual Report shows that specialists in these areas of expertise are very few in Botswana and most are based in the private hospitals. This is despite the fact that the public healthcare facilities care for a proportionately larger population than the private healthcare facilities (Botswana Health Professions Council, 2013). In other cases, because of inadequate capacity within government facilities, patients that need intensive care are referred to intensive care units in private hospitals.

Table 14: Value of Health Services Procured from Local Health Facilities - 2009/10 - 2013/14

Name of Facility	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014
Renal Care	148 775	3 273 342	6 884 828	10 768 033	13 761 605
Cardiac	1 118 544	1 224 439	1 937 866	724 191	2 927 562
BP and Kidney	-	-	462 275	662 987	1 006 671
Pronto	816 960	816 960	2 763 191	2 557 475	3 610 575
Francistown Radiology	-	254 814	390 429	98 681	62 490
Tati River Clinic	-	10 064	34 646	-	1 182 500
Northern Heart	-	-	99 456	369 320	45 080
Gaborone Private Hospital	10 616 506	17 048 399	23 294 904	33 330 901	30 566 918
Lenmed Bokamoso Hospital	-	-	-	10 062 955	38 012 821
Medical Imaging	-	-	-	315 565	538 550
Total	12 700 785	22 628 019	35 867 596	58 890 108	91 714 771

Source: Ministry of Health

Table 14 shows health services procured from the local private health facilities during the financial years 2009/10 – 2013/14. In 2013/14, the value of the health services had risen significantly to BWP 91.7million from only BWP12.7million in 2009/10. Services from BPH, which government only started procuring from in 2012/13, had reached BWP38million (about 42 percent of the total) in 2013/14. Although the increasing value of services procured from the local private health facilities is not accompanied by a reduction in imports of health services through Mode 2, there are indications that more services are being provided to the public.

As discussed under 4.3.2 above, for the health services for which Botswana has made commitments in GATS, save for the horizontal commitments requiring approvals relating to international transfer of funds, there are no restrictions under Mode 2. Botswana has not made any other commitments under any other trade agreement. The requests from the EU do not include health services. The requests from South Africa are under the SADC Negotiations on Trade in Services. They cover "Hospital Services" (CPC 9311) and "Other Human Health Services" (CPC 9319). South Africa is requesting full liberalisation on market access and national treatment in Modes 1, 2 and 3 (SADC Secretariat, 2014).

4.6 Mode 3: Commercial Presence

4.6.1 Foreign Direct Investment in the Health Services Sector

Data on inward and outward FDI is obtained from the central bank. It does not disaggregate FDI by sector, thus, it gives no indication on the status of FDI in health. In this study, FDI in the health sector is estimated by looking at the extent of foreign interest in the private facilities providing health services. This study only covers private hospitals, medical aid schemes and medical laboratories as major channels through which FDI and trade in health services could possibly occur.

As stated in 4.3.4 above, there are only two major private hospitals in the country, which this study has covered. It has been established through interviews that the foreign investors do not only have commercial interest in the two major private hospitals in Botswana but also participate substantially in their operations. In both major private hospitals, South African

hospital groups have commercial interest in them and manage them. There is no foreign participation in the medical aid schemes and medical laboratories.

GPH was established in 1992 through a joint venture between an Irish company and the Botswana Development Corporation (BDC) as the majority shareholder. The shareholding of the Irish company was later sold to a South African company called Afrox, which also subsequently sold its shareholding to Life Healthcare Group, which is also a South African company. Currently, Life Healthcare Group of South Africa, at 51 percent of shareholding is the majority shareholder in GPH. The remaining 49 percent in shareholding is distributed between two companies, another one being made up of the medical specialists practising at the hospital. In terms of the operation of the hospital, it is part of the Life Healthcare Group and thus it is operated according to the business model of the group. Until very recently, the key management positions of the hospital were occupied mostly by staff originating from the mother company in South Africa. The position of Hospital Manager has since been localised (Interview with Management of GPH).

BPH was established by two medical aid schemes, Botswana Public Officers Medical Aid Scheme (BPOMAS) and PULA Medical Aid Scheme (PULA). Lenmed Health, a South African hospital group later bought a 30 percent stake in the hospital investment. Thus the hospital is now a joint venture between a local entity and a foreign company, even though the foreign company is not the majority shareholder as in the case of GPH.

4.6.2 Policy and Regulatory Measures Affecting Mode 3

Botswana's foreign investment regime is viewed to be open (World Trade Organisation, 2009). There exists a comprehensive national investment strategy that seeks to "..... attract high levels of domestic and foreign investment inflows that will make Botswana the most preferred country of choice for business location and tourist visits" (Government of Botswana, 2009c). Health services is one of the sectors that the country wishes to attract FDI in. Incentives to attract investment, however, are only limited to the reduction in corporate income tax rate from the usual 22 percent to 15 percent which only applies to firms in the manufacturing and offshore financial services sectors. Also, based on a criteria that assesses the potential benefits of an investment to the economy, tax holidays of 5 – 10 years may be

granted, even though this window has been rarely used (World Trade Organisation, 2009). Despite the setting up of the Botswana Health Hub to drive the development of the healthcare sector into a regional centre of excellence, there are no specific incentives to attract investment into the health services sector. The national investment promotion agency views the lack of incentives as being inadequate to make Botswana attractive to firms that wish to invest in the health services sector.

Botswana's commitments under the GATS exclude "hospital services (CPC 9311)" and "other human health services n.e.c. (CPC 93199)" which include services provided by facilities such as medical laboratories and diagnostic imaging services. However, it is worth noting that the limitations listed under market access and national treatment for "medical and dental services" (CPC 9312) relate to the establishment of hospitals by foreign-owned entities. In particular, there is a market limitation on Mode 3, that "foreign-owned hospitals and clinics are encouraged to enter into joint ventures with local hospitals and clinics." On national treatment, there is a limitation that "the hospitals should employ Botswana nationals as doctors, medical personnel and supporting staff" (World Trade Organisation, 1995). Other than the GATS, Botswana has not made commitments in health services under any other trade agreement. Botswana is still to respond to South Africa's request on trade in health services which include subsectors "hospital services (CPC 9311)" and "other human health services n.e.c. (CPC 93199)" (SADC Secretariat, 2014).

4.7 Mode 4: Presence of Natural Persons

4.7.1 Estimating Inward Movement of Healthcare Professionals

The data on the health personnel in the Botswana context is obtained mainly from two sources, the Botswana Health Professions Council (BHPC) and the Nurses and Midwifery Council of Botswana (NMCB). Established by an Act of Parliament, the Botswana Health Professions Act (2001), the BHPC is responsible for registering all health professionals in the country except nurses and midwives. The health professionals that the BHPC registers are categorised into three groups, the first group being medical, dental and pharmacy professions. The second group comprises allied health professions, which includes a fairly wide list of health professions, among others, radiographers, opticians, biomedical engineers, dieticians,

paramedics and dental therapists. The third group consists of what the Act refers to as associated health professions (chiroprodists, homeopaths, naturopaths, osteopaths and acupuncturists). The Nursing and Midwifery Council is responsible for registering and licensing nurses and midwives to practise in Botswana. An interview with the Botswana Health Professions Council revealed that discussions are ongoing to merge the two councils.

The data from the BHPC was obtained from two sources; the BHPC Annual Report which was supplemented by data from the BHPC registration database. While the data from the BHPC registration database will presumably be more current, it does not disaggregate by other variables such as by employer. It also omits other professions, from the "Allied Health Professions" and "Associated Health Professions". On the other hand, the data from the BHPC Annual Report does not disaggregate by country of origin. It categorises data by only two groups, "Botswana" and "Other Nationalities". The two data sets show some small discrepancies, which could be a result of the changes that the electronic database would regularly show. The two data sets are used together to augment where either has weaknesses.

Table 15: Selected Health Professionals Registered to Practise in Botswana in 2013

	Citizens	Foreigners	Total	% Citizens	% of foreigners
Medical doctors	613	2122	2735	22.4	77.6
Dentists	190	82	272	69.9	30.1
Biomedical engineers	29	4	33	87.9	12.1
Physiotherapists	78	127	205	38.0	62.0
Occupational therapists	29	35	64	45.3	54.7
Nutritionists	3	0	3	100.0	0.0
Pharmacists	378	656	1034	36.6	63.4
Radiographers	42	230	272	15.4	84.6
Chiropractors	0	4	4	0.0	100.0
Opticians	0	19	19	0.0	100.0
Optometrists	33	28	61	54.1	45.9
Paramedics	257	41	298	86.2	13.8
Speech therapists	10	6	16	62.5	37.5

Source: Botswana Health Professions Council Annual Report 2012/13

Note: Registration to practise does not necessarily mean that one is practising. Though the proportions are small, some of the health professionals' registrations were 'dormant', meaning that they were not practising.

Table 15 shows that for some health professions, Botswana still relies more on foreigners than its nationals for the provision of services. Health professions such as medicine,

physiotherapy, occupational therapy, pharmacy, radiography, chiropractic medicine and optician have more than 50 percent of their professionals being foreigners. In some of these professions, the dependence on foreign nationals is fairly high, with all opticians and chiropractors registered to practise in Botswana being foreigners. The level of dependence on foreigners was at 84.6 percent and 77.6 percent for radiographers and medical doctors respectively.

Table 16: Medical Doctors Registered to Practise in Botswana by Areas of Specialty

	Citizens	Foreigners	Total
Acupuncturist	0	2	2
Anaesthesiologists	1	60	61
Cardiologists	0	5	5
Cardiothoracic Surgeons	0	3	3
Dermatologists	2	8	10
Endocrinologists	0	2	2
ENT Surgeons	2	16	18
Family Physicians	5	21	26
Microbiologists	0	3	3
General Medical Practitioners	421	1496	1917
General Surgeons	7	52	59
Nephrologists	2	4	6
Neurologists	0	3	3
Neurosurgeons	0	9	9
Obstetrics and Gynaecologists	7	68	75
Occupational Health Specialists	1	0	1
Oncologists	0	15	15
Ophthalmologists	2	25	27
Orthopaedic Surgeons	5	25	30
Pathologists	1	24	25
Paediatric Endocrinologists	2	0	2
Paediatricians	12	71	83
Plastic Surgeons	0	5	5
Psychiatrists	3	11	14
Public Health Specialists	14	51	65
Radiologists	1	24	25
Specialist Occupational Physicians	13	33	46
Specialist Physicians	13	32	45
Specialist Sports and Exercise Physician	0	4	4
Urologists	0	1	1

Source: Botswana Health Professions Council Annual Report 2012/13

In Table 16, the "Medicine" profession is further disaggregated into areas of specialty. It is clear that the reliance on foreign medical specialists is higher than other healthcare professions. Although for some of these medical specialty areas, the absolute numbers of the specialists are small, it is worth noting that for twelve areas of specialty, there are only foreigners. All the oncologists, neurosurgeons and plastic surgeons were foreigners. For five other medical specialists, anaesthesiologists, pathologists, radiologists, ophthalmologists and obstetrics and gynaecologists, over 90 percent of the personnel practising in Botswana were of foreign nationalities. Further, for six other areas of medical specialty, more than 80 percent of practitioners were foreigners.

Table 17: Selected Registered Specialist Doctors by Nationality

Speciality	Ophthalmologist	Gynaecologist	Anesthesiologist	Radiologist	Neurosurgeon	Oncologist	Plastic Surgeon	Pathologist	Total
Botswana	2	8	1	1	0	1	0	0	13
Ethiopia	1	4	4	1	0	0	0	0	10
Kenya	1	3	1	2	0	0	0	0	7
South Africa	1	1	2	2	0	0	1	1	8
Tanzania	0	4	0	3	1	0	0	0	8
Zimbabwe	3	3	2	1	0	3	0	2	14
Other African Countries	3	9	1	1	0	1	0	2	17
European Countries	0	8	7	0	1	0	2	0	18
China	6	3	7	2	1	2	0	1	22
India	8	18	18	3	0	7	0	5	59
Cuba	3	4	2	0	3	0	1	0	13
Other Asian Countries	0	4	2	2	1	0	0	1	10
USA	0	3	0	0	0	1	0	2	6
Total	28	72	47	18	7	15	4	14	205

Source: Botswana Health Professions Council Registration Database

Note: The anaesthesiologists and pathologists show the highest levels of discrepancy in data between the two data sets; the BHPC Annual Report shows that there were 61 anaesthesiologists and 25 pathologists while the BHPC registration database shows that there were only 47 anaesthesiologists and 14 pathologists. However, both data sets record that there were very few citizens in these professions.

In Table 17, except for gynaecology, for all the other medical professions shown, at least 90 percent of the practitioners are foreign. India tends to be the most important source of specialists, accounting for about 29 percent of all the 205 specialists registered. In terms of specific areas of speciality, Indians account for 7 out of the 15 oncologists registered to practise in Botswana, 18 out of the 47 anaesthesiologists and 8 out of the 28 ophthalmologists. It is worth noting that India's level of importance as a source of healthcare specialists is ahead of that of Cuba with which Botswana has a long-standing formalised relationship that entails assisting Botswana with provision of healthcare personnel. The

increasing trend of India's importance in this regard, however, could be explained by the current standing programme through which Indian specialists are occasionally brought into Botswana to perform mass operations of specific procedures, such as cataract surgery and heart bypass surgery. Nonetheless, this does not explain the dominance of Indians in other areas of specialty where they have the highest numbers of specialists relative to other countries.

China is another important source of specialists that practise in Botswana. Table 1 shows that 22 (or 11 percent) of the 205 specialists considered are from China. In Africa, Zimbabwe is the most important source of specialists for the Botswana health sector. Put together, African countries provide 64 (or 31percent) of the 205 specialists, with one in every five of them being from Zimbabwe.

4.7.2 Regulatory Measures Affecting Mode 4

Admitting foreign health personnel and businesses¹² in the healthcare service provision into the country is a very crucial part of the health sector in Botswana. As shown by the data on healthcare personnel practising in Botswana, there is a significant proportion of foreigners rendering services in the healthcare sector. In establishing the Botswana Health Hub, the Government of Botswana acknowledged that the local healthcare personnel will not be adequate in the short-term, necessitating the augmentation by foreign health professionals in order to realise the intended objectives of developing a regional centre for provision of healthcare services. Nevertheless, the presence of foreign healthcare professionals in Botswana, it would appear is out of need to meet the gap in the provision of healthcare rather than to provide services to foreigners seeking healthcare in Botswana. As shown by the discussions in other modes of supply, especially Mode 1 and Mode 2, indications are that Botswana barely exports health services.

¹² The regulatory measures affecting both natural persons (business people) who are by and large healthcare personnel and businesses are discussed here. This is because in terms of embarking on a business undertaking in the healthcare services sector, the natural person and the business itself (legal person) are essentially inseparable. The requirements for opening a business offering healthcare services emphasise on the characteristics of the natural person (legal person) such as qualifications and experience. This is unlike other sectors, generally, where other factors such as the funds for investment take precedence.

4.7.2.1 Requirements for Practising in Botswana

The legal provisions regulating healthcare professionals wishing to practise in Botswana are contained in two pieces of legislation – the Botswana Health Professions Act, Chapter 61:02 of 2001 and the Nurses and Midwives Act, Chapter 61:03 of 1995 (Republic of Botswana, 1995, 2001). The Botswana Health Professions Act applies to all healthcare professionals other than nurses and midwives while the Nurses and Midwives Act deals only with the nurses and midwives. From the interview with the BHPC, it has been gathered that it has been proposed that the two councils be merged.

The Botswana Health Professions Act of 2001 was preceded by the Medical, Dental and Pharmacy Act of 1999. The ambit of the Botswana Health Professions Act is, "to regulate and control the practice of medicine, dentistry, pharmacy and allied health professions, and for matters connected and associated therewith". Under Schedule B of the Act, is listed "Associated Health Professions" who are also regulated and controlled by the provisions of the Act. They include Chiropodists, Homeopaths, Naturopaths, Osteopaths and Acupuncturists. The Act establishes statutory structures for the implementation of the provisions of the Act. The statutory structures include the Botswana Health Professions Council (Section 3), the Committees (Section 7) and the Professional Boards (Section 8). The Act also provides for the registration and licensing of healthcare practitioners (Part III of the Act) and for the enquiries and Disciplinary Proceedings (Part IV of the Act). Part V of the Act contains Miscellaneous provisions, including the authority given to the Minister of Health to make Regulations for the implementation of the provisions of the Act.

Section 10.1 (a) - (c) lists the elements for which the examinations are administered on foreigners as part of the requirements for them to be registered and licensed to practise in Botswana. The elements include ascertaining whether the applicant;

- a) possesses a standard of professional knowledge and skill not less than that required by the Council for the practice of the relevant profession in Botswana;*
- b) has sufficient knowledge of the laws of Botswana relating to the practice of medicine, dentistry and the allied health professions in Botswana; and*
- c) is proficient in at least one of the official languages of Botswana.*

The current regulations of the Act provide for administration of examinations on foreigners who apply for registration and licensing to practise in Botswana. The same requirement is not applied on citizen healthcare professionals regardless of where they trained or practised before applying for registration and licensing. The BHPC provides the justification for not administering examinations on Botswana citizens by arguing that they may be trained in countries and institutions that are recognised by the Council. The Council also exempts from the examinations, all health professionals trained in local training institutions that the Council has accredited¹³ (Botswana Health Professions Council, 2013).

By exempting citizens of Botswana from sitting for the examination as a requirement for registration and licensing, the BHPC is implementing a discriminatory regulation. The justification that the citizens are trained in countries and institutions that are recognised by the BHPC is based on the assumption that all the healthcare professionals are trained at institutions chosen or recommended by the BHPC for the students. This assumption cannot necessarily be true because the BHPC does not sponsor students for training, thus is unlikely to have an input on the countries and institutions where they are trained. Although most Botswana students are sponsored through a government bursary, a small proportion of them obtain other scholarships or are self-sponsored. There are no indications that the BHPC has input in the selection of countries and institutions where the students are trained under all circumstances.

Thus the provision that exempts citizens from sitting for examinations is not only discriminatory against the foreigners but does not satisfy the objective for which the examinations are administered, especially section 10.1 (a) that seeks to ascertain the qualification and skill of the prospective healthcare professionals. Also, citizenship does not confer in the candidate for practising in Botswana, knowledge of the laws of Botswana relating to practising medicine, dentistry and allied health professions. In any case, most of these citizens will be new graduates who would have been trained in countries and institutions that would not have tailor-made their programmes for Botswana. The students

¹³ Accreditation of training institutions is in fact done by the Human Resource Development Council (HRDC), formerly the Tertiary Education Council (TEC). In the case of health-related training institutions, the HRDC does the accreditation exercise in consultation with the BHPC and the NMCB

would not have been exposed to the practical side of practising their respective professions in Botswana, at least during their training. It does not follow, therefore, that a citizen of Botswana trained outside the country will adequately satisfy the provisions of section 10.1, especially parts (a) and (b). Perhaps the seemingly unreasonableness of the Regulations as they relate to subjecting the foreigners to examinations has prompted the BHPC to consider revising the Regulations to require all candidates trained outside the country to sit the examinations.

It is a requirement that foreign nationals wishing to practise as healthcare professionals in Botswana also satisfy the immigration requirements which include possession of work and residence permits. Under the current regulations, the application for work permits will be assessed based on a point-based system which considers the type of profession of the applicant among other things such as age and length of experience. Most of the healthcare professions fall under the scarce skills category, which carry more points and thus proportionately increase the chances of one obtaining the work and residence permits (Ministry of Labour and Home Affairs, 2013).

4.7.3 Estimating Outward Movement of Healthcare Professionals

The data for estimating movement of Botswana healthcare professionals was by and large not available in the institutions that would ordinarily be expected to keep them, such as the BHPC, NMCB and the BONU. It is therefore, not possible to ascertain the extent of movement of healthcare professionals out of the country. Nevertheless, Table 18 shows the estimation of movement of nurses using the verifications sort by nurses intending to move out of the country. It is cautioned that the verifications are only an indication in that one may obtain the verification but never actually move. Though the numbers are likely to be very small, the data include foreign nurses working in Botswana and returning to their countries or relocating to other countries. Also, when they have moved, at their destinations, the nurses may engage in jobs other than nursing. Such jobs include low-level jobs such as caring for the aged in old-age nursing homes. Nonetheless, this is the closest available data to estimate the movement of Botswana nurses working abroad.

Table 18: Verifications for Botswana Nurses by Country (2010 - 2014)

	2010	2011	2012	2013	2014	Total
USA	3	0	3	3	5	14
Namibia	1	59	14	16	45	135
South Africa	6	11	10	8	15	50
Other African Countries	9	5	2	5	4	25
UK	8	3	8	5	5	29
Canada	13	5	1	2	5	26
Australia	6	10	3	0	3	22
New Zealand	2	4	0	0	0	6
United Arab Emirates	2	4	0	0	0	6
Sweden	1	0	0	0	0	1
	51	101	41	39	82	314

Source: Nursing and Midwifery Council of Botswana

Table 18 shows that most Botswana nurses moved to neighbouring countries, Namibia, followed by South Africa during the period 2010 – 2014. However, it is noted that the number of nurses went up significantly in 2011 following a nationwide public workers' strike that led to the dismissal of some healthcare professionals for having illegally taken part in the strike action. It was later reported in the local and Namibian media that the nurses were seeking jobs outside the country, especially in Namibia (Modise, 2012; Smith, 2012). The numbers of verifications for Namibia-bound nurses significantly went down in 2012 and 2013, but picked up again in 2014. Movement of nurses to countries outside Africa, especially the developed countries; Canada, UK, USA, Australia and New Zealand is fairly minimal. In fact, the number of nurses moving to these countries reduced gradually since 2010.

For other healthcare professionals, especially doctors, despite the policy makers' concern about the citizens working outside the country, there is no available data to estimate the number of persons moving outside the country. Media reports indicate that the Department of Tertiary Education Financing (DTEF) estimated in 2013 that about 800 Botswana doctors decided to remain in countries where they were trained upon completion of their studies; the countries specifically mentioned were the UK where 240 doctors and engineers were reported to have not returned home; 47 other doctors were said to have not returned from Australia (Bothoko, 2013). Further, in July, 2014, the Minister of Education responded to a Parliamentary question and gave the numbers obtained in 2010, that 110, 46 and 30

healthcare professionals did not return from the UK, Australia and the USA respectively upon their completion of studies in those countries (Parliament of Botswana, 2014).

5 DISCUSSION

This study has mapped trade in health services in Botswana. It presents the state of the healthcare system, including the contributions of the public and private sector to provision of health services. The role of health insurance in financing the provision of health services, especially imports is addressed. It is shown that there are opportunities for reducing imports of health services through consumption abroad by attracting more investments in the establishment of health facilities in the country. In the long term, this could potentially lead to the development of health services for export, thus fulfilling the national strategies for strengthening the health sector's contribution to economic and export diversification.

The study attempted to provide estimates and description of the direction, magnitude and value of trade in health services in Botswana. It also endeavoured to establish the opportunities and challenges that result from liberalisation of trade in health services from a public health perspective. For instance, the impact of trade would have had on the provision of and access to health services by the populace.

The methodology used to answer the questions of the study has borrowed extensively from the WHO guide for conducting country studies on trade in health services. The WHO guide was used in particular to identify sources of data and information on:

- the variables that explain the state and environment of the economy and trade in the context of health services.
- the state of the healthcare system in both the public and private sector.
- trade flows (exports and imports) of health services through the four modes of supply.

Based on the WHO guide the instruments used to collect data and information from all institutions and individuals included obtaining data from existing institutional databases, face to face interviews and review of documents. Analysis of data was both quantitative and qualitative.

5.1 Summary of the Results

The major points of the findings of this study are summarised below:

- Botswana, an upper middle-income country has comparably better health status than other African countries. The country, however, compares badly against her middle-income counterparts. HIV/AIDS remains a key health challenge as shown by the high prevalence rates and high public expenditure to combat it.
- Trade policy and related strategies make mention of the health sector as having the potential to contribute to economic and export diversification. Other than the GATS commitments on health services, which exclude hospital services and services provided by medical laboratories and other facilities, Botswana is not pursuing any negotiations on health services. There is also no evidence of pursuance of measures to attract investment in the health sector and promote health services exports.
- At 80 percent, the public healthcare sector dominates the provision of health services, which are rendered to the public for virtually free.
- Botswana is a net importer of health services. Imports of health services are by both the public and private sector, especially through Mode 2 to augment the inadequacy of local services. Health education also accounts for imports of health services through Mode 2. Imports through Mode 1 are mostly of laboratory services. In terms of Mode 3, the only two private hospitals are joint ventures between the local entities and South African hospital groups which also operate the hospitals. On Mode 4, data is not available for Botswana health professionals working abroad, although government concerns through media reports indicate that there could be a sizeable number of especially doctors working in other countries. There is evidence of a significant dependence on foreign health professionals, especially medical doctors in Botswana.
- Health insurance plays a key role in the provision of health services to private patients. It also accounts for a sizeable value of imports of health services for insured members.
- There is also evidence of import substitution whereby the public health sector procures some of the services from the local private hospitals as opposed to foreign services suppliers. Modal substitution also occurs, especially between Mode 2 and Mode 4. It is induced by government procurement whereby healthcare professionals are contracted to enter the country to provide health services as opposed to patients travelling to access services in foreign countries.

5.2 Discussion of the Results

Despite that public healthcare sector accounts for delivery of services to 80 percent of the population, they are augmented by the private sector and imports of health services. The imports are through all modes of supply, even though Modes 2 and 4 seem the most significant. However, the role of FDI in the private sector provision is also important. The effect of FDI is also substantial through the participation of foreign entities in the operation and management of the major private hospitals. It is therefore, clear that without the imports of health services, the local services would fall short of providing access to healthcare to the population. Hence, the importance of trade to the population's access to health services cannot be underestimated.

The private healthcare sector is fairly small as shown by the low capacities of the private hospitals. Opportunities lie in attracting investment (including FDI) to establish private healthcare facilities, provided the potential investors ensure that such investments are commercially viable. Investment in the establishment of healthcare facilities would be important in contributing to the growth of the private sector and in turn the development of health services for export. In the short term, investment in the healthcare sector should lead to the reduction of imports especially through consumption abroad, as well as build local capacity and improve quality and competitiveness of services. In the long term, local facilities could export through servicing foreign patients. However, a comprehensive national strategy that covers attraction of FDI, trade negotiations on health services and the development of the requisite policy, legal and regulatory frameworks will be necessary to ensure success. Perhaps South Africa's requests on some health services under the SADC negotiations on trade in services could ignite interest on the part of Botswana to engage in negotiations in the health sector as well as take the necessary steps to deal with the gaps in policy, legal and regulatory frameworks. Together with the SADC Protocol on Health, a regional agreement that covers health services could provide a platform to pursue other important supportive factors for promoting exports such as the signing of mutual recognition agreements and harmonisation of standards and regulations in healthcare.

Availability of data and information on the health sector, including patterns of trade in health services is crucial in understanding the sector. The current serious shortage of data on several

variables makes it difficult to undertake research and analysis on the health services trade and enable making of policy decisions. For instance, because of lack of data, it is not known how the movement of healthcare workers to work in other countries affect provision of health services in Botswana. The effects on the economy in terms of, for example, the remittances and transfers from the health professionals or the loss of public investment on education and training of the professionals are also not adequately understood.

The role of health insurance in the provision of health services to the insured members is significant. However, only a small proportion of the population is covered. Health insurance does not only improve the insured members' access to health services but also enhances their choice. The health insurance contribution to imports of health services is also substantial, which indicates that the insured members' access and choice include foreign health facilities. There is need however, to put measures in place to increase coverage of health insurance as part of the broader process of addressing the issues of financing of healthcare.

6 CONCLUSION AND RECOMMENDATIONS

In Botswana, healthcare is dominated by the public health sector amidst a gradually developing private sector. Botswana is a net importer of health services. Imports of health services play a substantial augmentative role in the provision of health services. Against the background that policy makers believe the health sector could contribute to national objectives of diversifying the economy and exports, trade in health services is highly under-researched. The dearth of research in the area of trade in health services is compounded by acute shortage of data on some key variables. This study is a small contribution to research in the area. It has gone a long way in gathering data from different sources to provide insights in the area of trade in health services and will hopefully encourage policy discussions.

Policy makers and researchers in trade and health areas will need to do more to address the shortage of data and research. It is hoped that this study will provide a catalytic environment for engaging in research and public policy discussions in the area of trade in health services. The ministries of trade and health and related institutions such as the Botswana Health Hub and the Botswana Investment and Trade Centre should collaborate in commissioning research to support their institutions' strategic programmes in the areas of trade negotiations, investment promotion, export development and the development of the healthcare industry. This will contribute positively to the development and implementation of the national strategies for developing the healthcare sector, spur investment and make the sector globally competitive.

The national strategies for the development of the healthcare sector do not explicitly provide the necessary mechanisms for implementation. It would be of help to the country to strengthen the ideals and objectives of the Botswana Health Hub as a key/focal institution for developing the health services sector and preparing Botswana to meaningfully participate in trade in health services. When well structured and fully empowered, the Botswana Health Hub should coordinate the relevant healthcare-related institutions and facilities and other important stakeholders, including the private sector, to develop especially health services for the export market. Such strategy should be as broad enough as to cover all relevant issues, including among other things, the enabling legal and regulatory framework to deal with, for

instance, issues of e-health and engagement in negotiations on trade in health services in appropriately assessed and identified potential markets.

The inadequacy of official data on trade in health services has serious negative implications on the ability to do research and enable policy makers to make policies, plans and strategies, including participation in trade negotiations. The relevant authorities; Bank of Botswana, Statistics Botswana, Botswana Health Hub and the Ministry of Health should develop and implement a programme for addressing lack of data in trade in health services. Such a programme should be adequately resourced and should include the collection, collating and publishing of available data from different health institutions and facilities as well as relevant stakeholder institutions from sectors such as education and labour. It should also provide for the conducting of periodic surveys to augment data from existing official sources.

Health insurance or medical aid, as it is commonly referred to in Botswana, plays an important role in facilitating access to health services, including foreign health services. Continual improvement of the rules governing access to health services especially by covering more countries (as health service providers) could go a long way in further improving access to healthcare as well as reducing the cost to the patients. Further, strategies should be developed and implemented by government and other relevant stakeholders such as the private sector and labour to increase access to health insurance services in order to enhance access to health services by the population.

A number of research areas need to be pursued in order to inform policy making and implementation in the area of trade in health services. They include, the impact that trade in health services has had on the economy generally. Specifically, the areas for future research include:

- the impact of trade on the provision of health services in Botswana.
- the magnitude, direction and impact of movement of healthcare professionals out of Botswana. Such studies could cover issues of the levels of remittances and transfers and their impact on the economy and the families of the workers.
- financing of healthcare, including the roles played by health insurance.

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ANNEX 1: CHECKLISTS OF QUESTIONS FOR INSTITUTIONS INTERVIEWED

Checklist of questions – Department of Tertiary Education Financing (DTEF)

Policy and Strategy

- What are the policies/strategies for government on training health personnel for the country?
- What are the plans for local vs foreign training?
- What are the challenges related to sponsoring students in health-related programmes, locally and internationally?
- What have been the trends in terms of numbers trained outside compared to those trained locally? What influenced the trends?
- Do you have any formal arrangements with other countries or foreign institutions to facilitate the training of health personnel outside Botswana? Which countries or institutions? What is the scope of the arrangement(s)?
- What has been the effect of the establishment of tertiary institutions in Botswana, such as the UB School of Medicine, BIUST and others?

Required data on Botswana students in health-related disciplines trained outside the country

- Data on number of students by programme of study by country of study over the last five years.
- Data on expenditure on students by programme of study by country of study over the last five years.
- Data on number of graduates by programme of study by country of study over the last five years.
- Data on number of graduates who did not return to Botswana by programme of study by country of study over the last five years.

Checklist of questions – Ministry of Health

Policy, Strategy and Processes

Mode 2: Consumption Abroad

- What policies are followed when referring patients for health services outside the country?

- Which factors do you consider when referring patients to different countries?
- Which countries do you refer most patients to?
- Is there any reason why patients are referred to these countries and not any other ones?
- For which diseases/conditions do you refer patients?
- Which cost items related to the referral does government cover?
- Which cost items related to the referral does government not cover?
- What challenges do you face in the referrals to foreign countries?
- Which other services do you use in the referral processes? How do you procure them?
- Does Government of Botswana have any formal agreements with other countries in relation to referrals and accessing of health services outside the country? If yes, which countries? What do the agreement(s) cover?
- Are there any formal arrangements with institution(s) to facilitate the referrals outside the country? If yes, which institution(s)? What is the scope of the arrangement(s)?
- In the past five years, what have been the trends in terms of referrals outside the country? Has there been an increase? To which countries and for which diseases/conditions/medical procedures? What explains the trends?

Mode 1: Cross-border Supply

- Are there other services (e.g. diagnosis, laboratory tests etc) that you procure from foreign countries without referring patients?
- If yes to above, which services?
- From which countries?
- Which mode of accessing these services do you use mostly; email, post, courier?
- Does Botswana have formal arrangements with other countries/institutions for purposes of accessing these services? If yes, which countries/institutions?

Mode 4: Presence of Natural Persons

- Do you engage foreign based medical personnel on temporary/visiting basis?
- If yes, which ones? For how long?
- Does Botswana have formal arrangements with other countries/institutions for facilitating such engagements? Which countries/institutions? What are the parameters of the arrangements?

Required data on health services procured from foreign countries

- Data on number of patients referred outside the country by country where they were referred and diseases/medical conditions/services for which they were referred over the last five years.
- Data on expenditure on patients referred outside the country by country where they were referred and diseases/medical conditions/services for which they were referred over the last five years.

- Data on services procured from foreign countries by country by services by value.
- Data on foreign health personnel (temporarily residing in country) engaged to provide services locally?

Checklist of questions – Botswana Health Professions Council (BHPC)

Mandate of the BHPC

- What does the BHPC do?
- Which statutes/law give effect to the BHPC?
- How is the BHPC structured?
- How is the BHPC funded?
- Which health care personnel do you register?
- What are the requirements for registration? What are the processes?
- What other requirements are necessary on foreign healthcare professionals?
- Do you have mutual recognition agreements with other countries? Which countries?
- How do you deal with 'visiting' healthcare personnel offering services in Botswana?

Mode 4: Movement of Persons offering health services

- Data on healthcare personnel registered by the BHPC and working in Botswana by nationality/country of origin.
- Data on healthcare personnel registered by the BHPC working in Botswana by facility, ie, public vs private.
- Data on Botswana nationals medical personnel working outside Botswana.
- Data on 'visiting'/part-time healthcare personnel practising in Botswana.

Checklist of questions – medical laboratories

Mode 1: Cross-border Supply

- 5-year period annual data on services (e.g. laboratory tests, radiology, interpretation of results etc) that you procure from foreign countries through use of surface mail, courier, internet-based communication etc.
 - The services
 - Countries from which they were procured
 - The value of the services procured disaggregated by year and country
- 5-year period annual data on services (e.g. laboratory tests, radiology, interpretation of results etc) procured from the laboratory by foreign countries through use of surface mail, courier, internet-based communication etc.
 - The services

- The countries which procure them
- The value of the services procured disaggregated by year, country

Mode 2: Consumption Abroad

- Data on patients referred to other countries for services not available in the local laboratory over the past 5 years.
- Data on foreign nationals accessing services from the laboratory over the past 5 years.

Mode 3: Commercial Presence

- Data on ownership structure of the laboratory. Is there foreign ownership in laboratory? If yes, what percentage is owned by foreigners?
- Data on foreign investment on the establishment of the laboratory.
- Does the laboratory or its owners have investments outside the country? If yes which countries?

Mode 4: Presence of Natural Persons

- Data on professional staff of the laboratory by country of origin and areas of specialty.
- Views on the processes involved in engaging/employing foreign professional staff. Do the processes promote or inhibit employment of foreigners?

Checklist of questions – Nursing and Midwifery Council

Mandate of the Nursing and Midwifery Council

- What does the Nursing and Midwifery Council do?
- Which statutes/law give effect to the Nursing and Midwifery Council?
- How is the Council structured
- How is the Council funded?
- Which health care personnel do you register?
- What are the requirements for registration?
- What other requirements are necessary on foreign healthcare professionals?
- How do you deal with 'visiting' healthcare personnel offering services in Botswana?

Mode 4: Movement of Persons offering health services

- Data on healthcare personnel registered by the Council and working in Botswana by nationality/country of origin.
- Data on healthcare personnel registered by the Council and working in Botswana by facility, ie, public vs private.

- Data on Botswana nationals medical personnel working outside Botswana.
- Data on 'visiting'/part-time healthcare personnel practising in Botswana.

Checklist of questions – Private Hospitals

Mode 1: Cross-border Supply

- Data on services (e.g. diagnosis, laboratory tests etc) that you procure from foreign countries through use of surface mail, courier, internet-based communication, telemedicine etc
 - The services
 - Countries from which they were procured
 - The value of the services procured disaggregated by year, country
- Data on services procured from the hospital by foreign countries
 - The services
 - The countries which procure them
 - The value of the services procured disaggregated by year, country

Mode 2: Consumption Abroad

- Data on patients referred to other countries for services not available in-house.
- Data on foreign nationals accessing health services in the hospital over the past 5 years.

Mode 3: Commercial Presence

- Data on ownership structure of the hospital. Is there foreign ownership in the hospital? If yes, what percentage is owned by foreigners?
- Data on foreign investment on the establishment of the hospital or specific facilities within the hospital.
- Does the hospital or its owners have investments outside the country? If yes which countries?

Mode 4: Presence of Natural Persons

- Data on healthcare professionals by country of origin and areas of specialty.
- Data on foreign healthcare professionals engaged on temporary basis by country of origin and areas of specialty.
- Views on the processes involved in engaging/employing foreign health professionals. Are they promote or inhibit employment of foreigners?

Checklist of questions – health insurance companies

Background and services of the medical aid scheme

- The coverage of the medical aid scheme; Are there any exclusions based on some criteria?
- Membership growth?; Growth in funds?; Growth in services offered?
- How prevalent is use of foreign medical/health services among your members?;
- Which services in particular dominate in terms of use of foreign service providers?;
- Which countries dominate supply of medical/health services to your membership?;
- What rules apply to use of foreign medical/health services?
- What are the major objectives of the rules?; Are they meant to promote or reduce use of foreign medical/health services?;
- To what extent do the rules cater for medical tourism? What happens when your members travel outside the country?;
- Are there any formalised arrangements with foreign based facilities for coverage of members when travelling or staying in foreign countries?;
- Do the rules cater for cosmetic surgery?;
- Does the scheme cover for other expenses other than medical/health services when patients travel?; Which ones?
- What is your general impression of foreign medical/health services in relation to the local ones?; Are they more (or less) expensive?; Are they of higher (or lower quality)?;
- What necessitates use of foreign medical/health services; Is it absence in the domestic market?; Is it shortage in the domestic market?; Is it lack of quality required by your membership?
- What percentage of pay-outs go to foreign services suppliers?

Mode 1: Cross-Border Supply:

- Does your medical/health insurance/aid scheme cover foreigners? If yes, what rules apply?;
- Do you permit procurement of services through post, email and other communication methods that do not involve the travel of neither the patient nor the service provider?
- What annual value of these services have you paid for in the past five years?

Mode 2: Consumption Abroad

- What value have you paid for involving services rendered to your members outside the country over the past five years? For which medical procedures?

Mode 3: Commercial Presence

- Do foreigners/foreign firms have interest in this medical/insurance business? If yes what proportion of interest is foreign?

Checklist of questions – Botswana Health Hub

- What informed the establishment of the Health Hub?
- Any strategy document relating to the fulfilment of the objectives of the Health Hub?
- What is the main objective/mandate of the Health Hub?

- How is the Health Hub constituted? Is it by Act of Parliament, Presidential Decree or just a department in the Ministry?
- How is it resourced? The source of its budget? The value of its annual budget? The number of personnel?
- Engagement with the stakeholders? Which ones? What issues have the stakeholders raised?
- Which information about the health sector do you keep?
- What is the capacity of health services in Botswana?
 - Number and capacity of private health facilities
 - Number of private hospital beds
 - Number of theatres; laboratories;

Mode 1: Cross-Border Supply

- What is the value of cross-border services sourced from health providers outside Botswana over the past five years? For example, diagnosis, blood tests, telemedicine etc.
- What is the value of cross-border services provided to foreigners in Botswana over the past five years?

Mode 2: Consumption Abroad

- How much does government spend on sending Batswana outside the country for medical purposes; for the past 5 years?
- What is the value of medical services rendered to foreigners who accessed services while in Botswana over the last 5 years?

Mode 3: Commercial Presence

- What strategies are in place to attract investment in private healthcare?
- Has there been inward private investment in healthcare services in the past five years?
- What is the value of the investment?
- Any outward investment in healthcare services; that is, has there been Botswana firms investing in other countries in the past five years? If yes, which countries and what is the value of the investment?

Mode 4: Movement of Persons

- Data on health personnel working in Botswana by nationality.
- Data on Batswana health personnel working outside Botswana.

Checklist of questions – Botswana Investment and Trade Centre (BITC)

- What is the sectoral focus of the BITC on investment promotion?
- Is the health sector part of the focus? Would you say health services is a priority area for FDI attraction?
- Is the BITC targeting any niche area in the healthcare services for attracting FDI?

- Are there any incentives to offer potential investors in the healthcare services? What are they?
- Would you say there are any disincentives against FDI in the healthcare services sector?
- Other than BITC, which other professional and governmental bodies do you deal with in regulating FDI-related establishments?
- What factors do you think affect FDI attraction in the healthcare services?
- Has BITC attracted any FDI in healthcare sector; in healthcare services over the last 5 years?
 - If yes, the values of the FDI attracted; the areas of the FDI – hospitals; clinics?
 - What has been the impact of the FDI-related establishments on employment of locals?
 - Any outward investment in healthcare services; that is, has there been Botswana firms investing in other countries in the past five years? If yes, which countries and what is the value of the investment?
- Would you say attracting FDI in healthcare services has been a success? Why? Why not?
- How do you think Botswana's GATS commitments have contributed to the performance and impact of attracting FDI in healthcare services? Why? Why not?
- Are the data on FDI in healthcare services readily available?
- Who collects the data?
- How good are the data on FDI in healthcare services?
- How is the BITC interaction with the Health Hub; with the Ministry of Health; with other institutions and entities in the health sector?

Checklist of questions – Ministry of Trade and Industry

Macroeconomic and trade environment

- What is the current state of Botswana's GATS commitments? Do they include health services? Do other commitments in other trade agreements include health services?
- What is the current state of requests received by Botswana under the GATS 2000 negotiations? Are health services included in the requests? Are there requests in other agreements that include health services?
- What offer has Botswana made under the GATS 2000 negotiations? Do the offers include health services? Has Botswana made offers in health services in other agreements?
- What are the expected benefits from liberalising services sector trade and investment under the GATS and/or any other agreements? Are there any benefits specific to healthcare services?
- In which services sectors and/or modes of supply do you think Botswana has comparative advantage? Does Botswana have comparative advantage in health services?
- What is Botswana's trade policy with regard to health services?
- Are health services a priority in the overall trade policy?
- Are health services a priority in the overall investment policy?
- What are Botswana's main areas of comparative advantage within the health sector?

Mode 1: Cross-border supply

- What are Botswana's commitments on Mode 1 in health services?
- What are Botswana's commitments in other services, such as health insurance, telecommunications and business services which have a bearing on Mode 1 and health services?
- What are the existing barriers to e-health? (Are they legal, financial, infrastructural, human resource, technical)?
- Availability and quality of data on Mode 1.

Mode 2: Consumption Abroad

- What are Botswana's commitments on Mode 2 in health services?
- What are Botswana's commitments in other services, such as health insurance, telecommunications and business services which have a bearing on Mode 2 and health services?
- What are the major policy incentives that affect Mode 2-related healthcare? e.g. setting up of hospitals, procurement, insurance portability, subsidies, tax treatment.
- What are the major policy disincentives that affect Mode 2-related healthcare? e.g. foreign exchange restrictions, lack of insurance portability, price restrictions, taxes.
- Availability and quality of data on Mode 2.

Mode 3: Commercial Presence

- What are Botswana's commitments on Mode 3 in health services?
- What are Botswana's commitments in other services, such as health insurance, telecommunications, construction and business services which have a bearing on Mode 3 and health services?
- Availability and quality of data on Mode 3.

Mode 4: Movement of Natural Persons

- What are Botswana's commitments on Mode 4 in health services?
- What are Botswana's commitments in other services, such as health insurance, telecommunications, construction and business services which have a bearing on Mode 4 and health services?
- Availability and quality of data on Mode 4.

ANNEX 2: LIST OF INSTITUTIONS AND FACILITIES INTERVIEWED AND/OR PROVIDED DATA/INFORMATION

1. Ministry of Health
2. Botswana Health Professions Council
3. Nursing and Midwifery Council of Botswana
4. Department of Tertiary Education Financing
5. Associated Fund Administrators (administrators of PULA Medical Aid and Botswana Public Officers' Medical Aid Society)
6. South View (administrators of Botswana Medical Aid Society – BOMaid)
7. Lenmed Bokamoso Private Hospital
8. Diagnofirm
9. Botswana Investment and Trade Centre
10. Lifecare Gaborone Private Hospital
11. National Health Laboratory
12. Ministry of Trade and Industry

ANNEX 3: BOTSWANA'S SCHEDULE OF GATS HORIZONTAL COMMITMENTS AND SPECIFIC COMMITMENTS ON HEALTH SERVICES

Sector or sub-sector	Limitations on market access	Limitations on national treatment	Additional commitments
I. HORIZONTAL COMMITMENTS			
ALL SECTORS INCLUDED IN THIS SCHEDULE	<p>1), 2) None</p> <p>3) All juridical persons must be registered with the Registrar of Companies</p> <p>All juridical persons are required to have a licence issued by the relevant authorities</p>	<p>1), 2) Capital remittances and transfer of funds require approval by the Bank of Botswana (Central Bank).</p> <p>Fees payable to the Bank of Botswana.</p> <p>Fees payable to non-resident service supplier are subject to approval of the Bank of Botswana.</p> <p>3) The Government does not have a fixed ratio of equity between foreign and local companies. But foreign investors are encouraged to enter into joint ventures with local investors.</p> <p>Juridical persons who specialise in providing services should be registered in their countries of origin.</p> <p>The Ministry of Commerce and Industry should be notified of all sale of business interests, mergers and take-overs.</p> <p>When foreign investors sell their interests in resident companies, locals</p>	

Sector or sub-sector	Limitations on market access	Limitations on national treatment	Additional commitments
	<p>4) Entry and residence in Botswana of foreign natural persons is subject to immigration laws, regulations and guidelines and procedures.</p> <p>Employment in Botswana of foreign natural persons is subject to labour laws, regulations and procedures. For a foreign natural person to work in Botswana a residence and work permit is required.</p> <p>Foreign natural persons shall be employed by companies that provide services within Botswana only as managers, executives, special technicians and highly qualified professionals.</p> <p>Investors are required to conform to the requirements of the localisation policy. Investors are required to train citizens in order to enable them to assume senior management positions over time.</p> <p>Professionals are required to register with the appropriate professional body.</p>	<p>should be given priority to purchase such interests.</p> <p>4) Professional foreign natural persons should be recognised as such and they should have rights to practise in their countries of origin.</p> <p>Professional natural persons should be recognised and be registered by the appropriate committee or council.</p>	

Sector or sub-sector	Limitations on market access	Limitations on national treatment	Additional commitments
<p>k) Other</p> <p>Specialised medical services including forensic medicine, neuro-surgery, cardio-thoracic surgery, micro-vascular surgery, plastic surgery, traumatology, anaesthesiology, clinical immunology, and oncology, child psychiatry, physical medicine and intensive care specialist (CPC 93122)</p>	<p>4) Unbound</p> <p>1) Unbound</p> <p>2) None</p> <p>3) The services should only be supplied by natural persons</p> <p>4) Unbound</p>	<p>4) Unbound</p> <p>1) Unbound</p> <p>2) None</p> <p>3) The qualifications of the service suppliers should be recognised by the Botswana Medical Council.</p> <p>4) Unbound</p>	